BUILDING A CITY IN THE WILDERNESS: CONSTRUCTION CAMPS OF THE ALABAMA POWER COMPANY

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DEDICATION

For my parents.

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> Alabama Power Company provided the author of this dissertation access to archival materials for academic research purposes only and did not otherwise assist in its drafting. The company does not vouch for the accuracy of the interpretations of the final work product. The information and documentation from Alabama Power Company Corporate Archives must be viewed in its limited historical context and is in no way representative of the current values and culture of Alabama Power Company. Our company is committed to treating all people with respect, dignity, and fairness.

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SUMMARY

This dissertation is concerned with how architecture can actively be incorporated into processes of community formation within the Alabama Power Company worker camps constructed from 1905–1930. The Alabama Power Company provided comfortable housing and promoted a feeling of a community for its workers (1) to attract a suitable workforce to a remote location far removed from amenities; (2) to ensure that the workers remained loyal to the company for an extended period of time so that time and money were not spent unnecessarily in training and certification of specialty professional workers; (3) to ensure the loyalty of employees through the creation of the fellowship of the camps and the sales of electricity and electric household appliances by holding up the camps as cities of the future; (4) to celebrate the advances represented by electrical power and advertise their wares to the public; (5) and to provide a healthy workplace and living environment for the families of the workers so that the company town served as a flagship for the company's publicity campaigns. Many studies have examined the planning of mill villages and company towns, but this dissertation seeks to examine a subset of those living arrangements regarding a company town that was intended to last only for a single construction project. This type of planned obsolescence sets the Alabama Power Company camps apart from the more permanent sites such as the mill towns of early New England or the later mining and manufacturing towns of the American South.

This is an investigation of the rehabilitation of a relatively unknown history through the examination of peripheral source materials. None of these materials was expected to speak the truth over a long period of time. These materials are documentation

for the conveyance of information too complex to be verbally transmitted. The data are drawn primarily from archival research and literature review, which provide context for a unique set of circumstances that engendered this subset of living arrangements for a worker population. Construction drawings, contractor's progress reports, memoirs, the company newsmagazine, and dedications of new hydraulic power plants and dams where printed events schedules were given as mementos to attendees provide additional support data for reconstruction of this history.

This dissertation is arranged in seven sections: Chapter 1 sets out the reasons for the camps' ephemeral construction related to the growth of US energy production and the development of Alabama's economic potential; Chapter 2 describes research by others that informs the study of the APC camps, particularly the social housing reform movements intended to produce happier more productive workers; Chapter 3 sets out to describe and catalog the varieties of homes provided and the changes made to them as the company learned how to improve processes; Chapter 4 describes support structures in the camps such as hospitals, mess halls, and commissaries, again exploring the ways in which the learning process of the designers was made apparent; Chapter 5 addresses camp demographics, race, class, and gender issues, how different groups were accommodated, spatial layouts as demonstrations of hierarchies, and the reimagining of the camps as resorts for APC office workers, and the use of a company magazine, *Powergrams,* as a tool for community building; Chapter 6 compares a selection of company towns in Alabama, Tennessee, and Nevada that are similar to the APC camps; and Chapter 7 seeks to situate this nearly forgotten history in terms of today's world by examining the questions raised by the data, such as: What does corporate welfare look

like in the built environment? What were the messages embedded in the company branding? How should one think about what the architecture of the early twentieth century in the South says about social structures?

This dissertation places the APC and its worker camps squarely into the discussion of corporate welfare programs, issues of race, class, and gendered discrimination in the American South during the first half of the twentieth century as one more example. The discrimination is manifested in the architecture and underscores much of what has previously been published; however, the answers to such questions cannot be more than suggestive as the APC archives cannot give us the entire picture. In the end, with Facebook, Amazon, Google, and Apple developing modern-day company towns, this historical examination of the APC camps provides essential background for understanding the developing social role of the corporation and for assessing its future direction.

CHAPTER 1. DEVELOPMENT OF HYDROPOWER IN ALABAMA

The history of infrastructure for modern life and industrial production is little explored in relation to the history of architecture. However, at the Alabama Power Company (APC), architecture helped attract and accommodate the large-scale labor force that built this infrastructure both in response to existing social norms and with a view to the maintenance of healthy, happy, and productive workers. The company also had to provide for some workers' families, although not all workers were treated the same. Many studies discuss the planning of mill villages and company towns, but this dissertation seeks to examine a subset of those living arrangements: a company town that was planned to last only for the duration of a single construction project. This type of planned obsolescence sets these APC company towns apart from the better-known sites such as the mill towns of early New England or the later mining and manufacturing towns of the American South, which are often cited in discussions of the early industrial era living conditions of worker populations. These sites are so well known, it seems too facile to discuss them as precedents. There are few real connections between them and the APC camps, yet there are far fewer published precedent sites more similar. I have endeavored to locate closely comparative temporary worker towns, villages, or camps without much success. However, the well-known and a few lesser-known examples will be used to help clarify what were much more likely to have been the only known precedents for the designers of the APC camps.

There are concrete histories, and there are more thinly defined and delineated ideas of history.

This dissertation seeks to explore the rehabilitation of lesser-defined history through the examination of peripheral source materials that speak of the then-present and now in distant past. Henry Glassie[1] and Dell Upton[2] are scholars in the field of vernacular architecture who have underscored the need for the documentation, research, and preservation of America's common houses and the interdisciplinary nature of their studies. Unfortunately, the camps of the APC with their common houses are no longer extant, so the measured drawings and photographs made by Glassie and Upton cannot be emulated. However, the company's archives preserve a portion of the records of those camps. Glassie was particularly helpful to me early on in my research. His formal analyses of the structures he located in middle Virginia opened a window that admitted new insights about the structures I was encountering. The houses of the camps were only superficially delineated by the draftsmen working for the APC because the vernacular styles were well understood by both the designers and the workmen constructing them. There was no real need to delineate details that would frequently have to be adapted to field conditions. The woodlands cleared for the lakes provided the lumber for building temporary towns, so the construction was cheap, quick, and easy. None of those resources was expected to speak truth over a long period of time; they were simply documentation for the conveyance of information too complex to be verbally transmitted, in the case of construction drawings, or to record business transactions and calculate hours worked in the case of payroll receipts, or in the occasional dedication of a new dam

[1] Henry Glassie, *Folk Housing in Middle Virginia,* Knoxville: University of Tennessee Press, 1976.

[2] *Common Places, Readings in American Vernacular Architecture,* Dell Upton and John Micheal Vlach, eds., Athens: The University of Georgia Press, 1986, xiii. Also see Dell Upton, "The Power of Things: Recent Studies in American vernacular Architecture." *American Quarterly*, 1983, 263–279.

and hydraulic power plant where printed events schedules were given as mementos to the attendees. The company news magazines, the *Powergrams*, were meant to unite the workingmen and their families together under the tutelage of the APC and were more like letters written from camp to inform one's parents that everything was fine, and fun was to be found everywhere. These publications of the APC portrayed only one side of the narrative: the story of the higher status workers who had become part of the company "family," participants in the sort of corporate welfare practiced by large corporations and privately-held companies alike in the American South in the first half of the twentieth century. How, then, can we understand the world of the other employees, those not mentioned in the company documents? The evidence must be pieced together by assembling clues about how the camps functioned.

Some definitions for this examination are needed to be given because words vary over time, especially when used in multiple contexts. In lieu of listing all my definitions, I will give explanations when words come up in the text. I made choices about the format of the dissertation too. Logically, the chapters should move chronologically through time, but it was more efficient to set the stage (historically) for a discussion of the APC camps and then compare to other similar worker towns that may have come before or after in time. Only once the reader had become familiar with the APC camps' plans, types of buildings, and the ways the camps functioned is it reasonable to discuss the similarities and differences with precedents.

I do want to make clear that so many individuals participated in the management and daily running of the APC that names will not be used except in advancement of the argument or to help to clarify a situation. Generally speaking, "the company" refers to the

stockholders, directors, and management of the APC, and "the employees" usually means the hired hands but could include lower-level management and skilled labor, too.

To assess the functionality of the various structures and how the occupants inhabited these in daily life, we must understand the prevailing social norms for housing, ideas of recreation, and how people were educated. In each of these categories, the APC offered more than the rural population of Alabama, from which workers were drawn, could have reasonably expected of such an inaccessible site. Although it was not the first goal of the APC, living in the APC camps provided the workers and their families opportunities typically unavailable in rural Alabama. The APC helped to educate a new class of working families, ensure their health and safety, establish schools, churches, libraries, and recreational teams, which gives the impression that life-long feelings of company loyalty were created in the camps. But many voices are missing from the documentation preserved at the APC archive. The APC was carefully branding their products and themselves as a corporate entity, and they became adept at public relations. Their track record has been admired and emulated by successive corporations around the United States and globally. And there is much to be proud of. The company endures, having been led by progressive people who held lofty goals for profit and for the betterment of the people of Alabama and worked to make that dream a reality. The time is past to ask pertinent questions of those able to tell us what the corporate and social environments held for them and their families, their futures, and their aspirations. We can only look to the evidence of the built environment to find some of the answers, and this built environment now exists only in the corporate archives. This dissertation will endeavor to follow that paper trail and reconstruct the camps as carefully as possible to

be true to life to provide a glimpse into that world of corporate welfare where positive aspirations were frequently accompanied by discriminatory practices based on classifications of race, class, and gender: aspirations widespread in the period and place in question. The systemic discrimination of early twentieth-century Alabama is legendary, and the APC was certainly attuned to the common practices of the time. The company also was careful to appear progressive and inclusive in the public eye; the archives paint a saintly portrait, although the collection may have disposed of materials that showed the company in a less saintly light.

In this dissertation, five of the APC's earliest construction sites that required worker villages, or camps as they were called in Alabama, will be examined and compared. They are listed here with their dates of completion: Lay Dam, 1914; Gorgas Steam Plant, 1917; Mitchell Dam, 1923; Martin Dam, 1926; and Jordan Dam, 1928. It was common to add additional power-generating components at later dates that entailed a major construction phase with concomitant needs for housing construction workers. The dates above mark the general time frames of the first instances of camp construction and inhabitation. The site work and development of housing for the workforce typically began at least two years before completion, the time frame for most of the observations in this dissertation even if the camps' useful life extended over a longer period. In the chapter headings, the dates of the beginning and end of the initial or main construction project will be stated along with the original names of the dams before they were dedicated to important men who were honored for their service to the APC.

Each dam construction project was distinct because of its location, although all were remote from other towns or villages and set in a landscape of rugged topography.

They differed also in their dates of construction and the expertise of the construction crews that were built upon experiences gained in previous dam construction projects. The workers and their supervisors learned by doing, but there were also advances in equipment and training. As the production and use of electric power became more common and more widely spread, excitement built among the employees of the APC, who had been carefully schooled by the company to feel as if they were part of a team bringing their state into a bright and shining future via access to a reasonably priced and ready supply of electricity.

The rapid growth of the power grid proved to be a success larger than anyone had anticipated. The electricity was distributed first to major cities and later with the coming of the Great Depression and the Rural Electrification Administration (REA), even to the sparsely populated farm communities along the river bottomlands. Alabama was coming into its own in terms of manufacturing and scientific farming practices. The standard of living was being raised across the state in large part because of the labor by numerous APC construction crews. The advent of electric power for residential and commercial uses both pushed the local economies forward and meant workers could perform fewer jobs by hand. For the APC, this meant eliminating or at least lessening the dangerous and back-breaking labor of the men who built the early dams and pushing the old-fashioned Alabama construction job site into the twentieth century.

1.1 Energy Production in the United States

When the United States became a nation, firewood was the most frequently used fuel. As the country grew and technology advanced, coal became the largest energy source, powering factories and railroad engines that helped the country and its economy

grow. The coal mining industry was intimately connected with the creation and growth of the state of Alabama, which had tremendous deposits of coal near the surface. Coal fueled the great iron and steel industries in Birmingham and continues to be mined in Alabama today, although the once vast coalfields are nearly depleted. Coal is still an important energy source because it is used to generate electricity in areas where there is no alternative fuel.

Alabama has been rich in mineral resources, but the state is also blessed with wide rivers that flow across the state from the foothills of the Appalachian Mountains to the sea. Today, these rivers are employed in hydroelectric generation at dams constructed by the APC. Coal can be used to produce steam to turn turbines to generate electricity, but waterpower turns the turbines without generating heat or discharging particulates into the air. Hydropower is clean, efficient, and renewable, and best of all, the energy source is free, helping to keep the cost to consumers low. (However, we are beginning to understand damns can harm the diversity of plants and animal species and concrete is a very high-cost material in terms of sustainability.)

These days, we accept electric power as part of the natural order, but few realize that there was a long and much-debated controversy over the implementation of electric service. The conversion, when it finally began, was swift. The foreword of the Bonbright Survey of 1928 begins:

> Forty-five years ago the world was virtually without the use of electricity. It is hard for us today to realize just what this means. We have become so used to having the light answer the switch, the bell answer the button, the elevator answer the lever and the thousand and one other services of the genius of electric

> energy, that we find it difficult even to recall the clumsy mechanics of former days.[3]

These comments came at a time when most Americans were still without power. Roosevelt's rural electrification program and the Great Depression were yet to come.

Innovation is how new ideas become successful. In Anniston, Alabama, the Woodstock Iron Company lit a few streetlights and its workspaces by tapping the energy from a furnace. This was reported in the *Selma Times-Journal* on April 29, 1882. A little over four months later, the *New York Herald* described an odd light emanating from the offices of J. Pierpont Morgan on September 4, 1882. In retrospect, it seems prophetic that in Alabama the Woodstock Iron Company served the workmen at their task while Edison's light came to life in the office of the biggest business mogul of the era. By the following January, the city of Montgomery, Alabama had thirty-one streetlights shining, and in 1885, Capital City Railway Company asked permission to run electric cars in the city. Selma was lit by electric lights in 1886.[4] Alabama towns were quickly becoming electrified.

Not all cities of Alabama were so excited about the streetlights. Birmingham at first refused to pay for electric lights, but in 1885 the Elyton Land Company agreed to finance a plant to produce the necessary power with equipment it purchased from

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[3] *The Bonbright Survey of Electric Power and Light Companies of the United States*, edited by G. F. Wittig (New York: The McGraw-Hill Publishing Company, 1928). See also Bonbright Company, Inc. "A Survey of State Laws on Public Utility Commission Regulation in the United States," 1928, foreword. http://search.ebscohost.com.proxy.kennesaw.edu/login.aspx?direct=true&db=edshtl&AN=mdp.39015009299184&site=eds-live&scope=site. By 1928 automobiles were being turned out on assembly lines in Michigan and steel was being made in Chicago, Pittsburgh, and Birmingham all using electric power for at least part of the processes. Power generation was moving away from the municipally owned companies to larger state and regional companies. Bonbright was a banking investment company interested in the utility industries. They published their survey in the "best interests of the consuming public."

[4] Leah Rawls Atkins, *"Developed for the Service of Alabama," the Centennial History of the Alabama Power Company (*Birmingham, AL Alabama Power Company, 2006,) 10.

Thomas Houston Electric Car Company, a forerunner of the General Electric Company.[5] Birmingham was still a very young city. Founded by the Elyton Land Company in 1871, it grew so quickly it was called the "Magic City." There must have been many improvements to the infrastructure in this rapidly expanding city, which made for a tight budget.

Around the United States, the dynamos that typically produced electricity were tremendously expensive, and smaller towns could not afford to purchase them without creative financing. Some turned on the streetlights only when the moon was not shining. Some ran the current during the day only on Fridays so that women could iron clothes. Moreover, the production of hydropower was irregular because it depended on the flow of water in the creeks and rivers, and the equipment needed careful and frequent maintenance. Malfunctions were frequent, and a back-up network of other systems that could lend surplus power did not exist.[6] Electricity was a workhorse but one that could suddenly balk.

The street railways compelled Alabama cities to electrify, and Montgomery again led the nation, being the first city to electrify its cars in 1886. Local citizens referred to this street railway line as the "Lightning Route." In Birmingham, people talked about changing their street railway cars to electricity, but there was opposition. The cost and rumors of the danger of electric streetcars postponed such adoption until 1891.[7] Electric

[5] Atkins, 10.

[6] Atkins, 10, 11.

[7] Atkins, 10, 11.

streetcars were faster and less costly than mule-drawn streetcars, so they engendered "streetcar suburbs" all over the United States,[8] including Birmingham.

Electricity was becoming a driving force in national home sales. First seen as a dangerous demon of no virtue, residential electric inventions' life-enhancing enrichments began to tempt the housewife as soon as Edison introduced the electric iron as a way of selling more electricity. Advertising campaigns proclaimed that no one wanted to live in an antiquated home that could not be easily adapted to the use of modern equipment. The 1920s was a time of choices in period styles, various kinds of residential communities, and modes of homeownership, and alternative approaches to housing were on the national political agenda. When Herbert Hoover ran for re-election against an opponent who had espoused co-ops and low-cost housing in the cities, he won handily with the support of private builders and middle-class suburbanites.[9] Even in rural Alabama, homemakers aspired to own the latest labor-saving devices such as electric stoves and irons[10] and things as "frivolous" as toasters, egg coddlers, and electric mixers or vacuum cleaners advertised in popular magazines such as *Ladies' Home Journal* (founded in

[8] Gwendolyn Wright, *Building the Dream: A Social History of Housing in America* (Cambridge: MIT Press, 1980), 104.

[9] Wright, *196.*

[10] Earl Lifshey. *The Housewares Story, a History of the American Housewares Industry.* (Chicago: National Housewares Manufacturers Association, 1973). Joseph W. Meyers, who headed the research and development for Proctor Electric Corp. (later to become Proctor-Silex) was a young inventor who employed this innovative research tactic for field-testing his product. He built a hundred irons and tried to market then to the big electric manufacturing companies but was rebuffed. He took them to fairs and sold them for five dollars plus the trade-in of your old iron, ensuring his would be used. He kept up with his customers and perfected his irons using the advice of his "field testers". He also was able to perfect a thermostat that effectively "fire-proofed" his irons. The APC also advertised electric appliances and vacuum cleaners regularly in its *Powergrams* magazine which was sent by subscription to its employees and friends around the state.

1883)[11] and *Good Housekeeping* (founded in 1885.)[12] Alabama had an inviting market; the state only needed a reliable source of electric power.

When the APC's far-seeing first president, William Patrick Lay, initially began to consider the possibilities of producing electrical power for consumption by the people and industries of Alabama, Thomas Alva Edison had only recently begun producing power in his hometown, Philadelphia, Pennsylvania. For Edison, the big problem was in getting people to allow the powerful "genie" into their homes. He initially produced direct current (DC) because it lost less power over the delivery lines, but it also was dangerous. Electrocutions and fires were feared by his potential clients, and rightly so because the power was sent over bare, uninsulated lines charged with 220–240 volts. Edison switched to alternating current (AC) because it was less dangerous, even though it wasted energy during the transmission and so was more expensive to produce, but it was easier to sell.[13]

Although manufacturers were eager to reduce their labor costs by replacing some jobs with machinery, electric companies were not going to be profitable unless more consumers came on board. If individual households were given the opportunity to have electric lights and appliances in their homes, electric companies could recoup the costs of the transmission lines over time and bring down the cost of supplying the manufacturers, who were major power customers. Electricity had to be sold to the American public, who were slow to make the change from widely distributed and convenient, though dirty,

[11] https://en.wikipedia.org/wiki/Ladies'_Home_Journal

[12] https://en.wikipedia.org/wiki/Good_Housekeeping

[13] William E. Clement, *Selling Electric Service 1879–1954, creative salesmanship in the beginning and formative period of the electrical era* (New Orleans: American Printing Company, 1954).

smelly, and dangerous gas lights. This goal was achieved by offering a free electric iron to women if they would allow the installation of electric utility lines in their homes. Until the advent of the electric iron, women spent an inordinate amount of time in cleaning and pressing clothes and household linens, using a irons that had to be heated on a stove. Temperatures were not constant, and ruined shirts were all too commonly the product of accidents. An iron that could remain clean and at a constant temperature was a huge boon to the woman of the house. Edison perceived that the husbands would also be swayed by the improved condition of their shirts and allow electricity to be installed.

As an example, many men in the Gadsden, Alabama, steel mills made $12 a day. The town had electricity, but there was not much electrical service to outlying communities in 1926. Future Southern Company Vice President James F. Christ became a top salesman selling appliances to those steelworkers and their wives who allowed the APC to extend their services out into the suburbs and beyond. The APC would install the lines if enough revenue were produced.[14] Once the house was set up for electrical service, fans were the next big advance, followed by stoves, coffee pots, and toasters.[15] The same marketing ploy worked around the country, and a new industry expanded.

Lay was eager to bring power to his home state because Birmingham was in full production with steel mills filling the great wide valley, the center of a mineral-rich area that possessed all three major raw materials for steel making.[16] Also, the population

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[14] James F. Christ, *They Electrified the South: the story of the Southern electric system as told by James F. Christ*, self-published, 1981, 47.

[15] Clement, passim. See also, Ruth Schwartz Cowan, *More Work for Mother, The Ironies of Household Technology from the Open Hearth to the Microwave* (Basic Books, 1983). Also see, John Mellanby. *The History of Electric Wiring* (London: Macdonald and Company, 1957).

[16] Iron ore, limestone, and high-grade coal were all found in abundance in or near the valley, an unusual occurrence that made Birmingham steel competitive with any manufacturer in the world.

explosion produced by the income from steel mills supported secondary businesses. Grocers, bankers, and real estate speculators were busy meeting the needs of steelworkers and their families. Especially because of the railroads serving the steel industry, other factories bloomed in the landscape.

Apart from the railroads, Alabama is blessed with deep, wide rivers to transport goods to the port of Mobile. Along these rivers, many water-powered textile mills and fabric mills have been important employers in the region, and these mills benefitted from the addition of electricity as a power source, usually supplied by small, independently owned and operated steam plants. Lay saw a huge market, and he was in the right place at the right time. By purchasing the small, independent plants and adding others with higher capacity, Lay was able to provide a network of electrical power transmission lines to supply power to larger areas more efficiently and profitably. Later, in a report of the progress of the APC, the effect of unification and rehabilitation of properties acquired by the APC was found to have had "a very marked and favorable effect on financial costs. In 1912, there were numerous operating units . . . throughout the state."[17]

Birmingham steel was shipped by rail to any destination in the country or to the seaport of Mobile, Alabama, from which it traveled to international destinations.

[17] "History and Development of Alabama Power Company and Its Property, Jan. 26, 1948." Alabama Power Company Archives, 92–93. The anonymous document, consisting of loose pages, states that the data was obtained from records of various operating companies and their predecessors, and other sources, such as McGraw-Hill Central Station Directories, the US Census Bureau publications, etc., to illustrate the growth of the system of the APC. There were stock and bond issues because each small company operated under different rates of interest and the service in small communities was affected both by the volume of business in the area and the capability for the supply of power likewise limited (or deterred) new businesses which might seek to locate there. The consolidation of these small units into a large network meant improvement of the power supply to all, at uniform rates, and this put all towns on a more level playing field.

The son of a riverboat captain who plied the waters of the Coosa River in the eastern parts of the state, Lay knew all the river systems of Alabama well. He had selected potential sites for hydroelectric dams on the Coosa, Tombigbee, and Tennessee Rivers during his youth, but he had no wealthy backers. The problem for Lay was capital. It was not until he met Tom Martin, who had contacts in New York City, that a financial plan was made viable. Finally, Lay, Martin, and their new investors went to work on building their first dam to produce electric power for the people of Alabama.

The APC grew rapidly. It was the first large utility company in the Deep South and grew to be a huge conglomerate, the parent of other companies in surrounding states. In 1924, Tom Martin and Eugene Yates created the Southeastern Power & Light Company (SPLC) to operate smaller electric systems as one integrated system. This realized cost savings and improved the dependability of electrical service. They had already proven their skill in managing a large utility at the APC and were easily able to find further financial backing. First, they bought the APC, owned by the Canadian holding company, Alabama Traction, Light and Power. In 1925, Georgia Railway and Power was added to SPLC, quickly followed by electric companies at Augusta, Columbus, Macon, and Rome, forming the Georgia Power Company as a division of SPLC. In 1926, small companies in the Florida panhandle and Mississippi were purchased and combined to form more divisions of SPLC. Also, in 1926, the division of South Carolina Power Company was formed through the purchase of several Charleston and other “low country” companies along the Atlantic coast. The Southern Company, formed in 1945, interconnected all of these resulting in a more dependable and efficient

system and provided each with opportunities for funding for construction, flexibility in leadership, and technical talent and experience.

Management moved around and up the corporate ladder. William E. Mitchell, APC's operating manager, became vice president and general manager of Georgia Power in early 1927 in the same year that C.B. McManus (manager of APCs northern division in Huntsville, Alabama) and James M. Oliver (APC operating engineer) also came to Georgia Power. Mitchell became president and Oliver executive vice-president of Georgia Power. McManus was president from 1947–1951 and president of the Southern Company from 1950–1957, then chairman of the board from then to his retirement,.[18] The upper echelon was thus constantly fed by an advancing team of men groomed and promoted from the ranks of talent in the lower divisions.

The learning curve was steep in the beginning. Books were sometimes inaccurately kept. Acquired companies were often shown at inflated worth. Then the Dixie Construction Company, a wholly owned subsidiary doing all the major construction work for its associates at a mark-up on labor and materials, formed, which seems of doubtful legality. But these minor transgressions "were later corrected," according to James F. Christ, who had worked his way from apprentice lineman while in college, to vice-president of the Southern Company.[19]

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[18] Christ, 39–40. This was the story of The Southern Company as told by Christ, who worked first as an apprentice lineman with APC in the summer of 1923, when he was an undergraduate at MIT. He joined APC in 1926 on a permanent basis, serving for twenty years at South Carolina Power Company of Charleston (beginning as Industrial Power Engineer and going up the corporate ladder to Vice president.) He was invited to join The Southern Power Company in 1947 as a Vice President, serving also as President of Gulf Power (in Pensacola, 1948–1955) and President of Southern Electric Generating Company of Birmingham (from 1957–1960.) Christ moved to Atlanta in 1960 as Vice President of The Southern Company, retiring at the end of 1965. Largely anecdotal, his book does shed light on the company's management, and though mostly congratulatory, he does mention a few bad apples.

[19] Christ.

Logical markets in Alabama and Georgia consisted of larger towns and industrial plants because market development requires a basis for recouping start-up costs. The first major groups to contract for power were the coal and ore mines in Alabama and textile mills in Georgia.[20] The APC grew quickly to be a leader in the southeastern states with national recognition as evidenced by its participation in national conferences and the frequency of visits by international groups to its dams and offices in Alabama.[21]

By the 1930s, it had been widely recognized that hydroelectric dams themselves were a great tourist attraction in along with the lakes formed behind them. The APC also recognized this trend, so the company promoted excursions to its camps in response to the changing expectations of the American public, especially as more and more families owned or had access to automobiles. Built as temporary structures, most of the APC camp structures were not able to stand the test of time, especially after World War II, when the economic boom enabled families to purchase land along the lake's shores and build their own recreational oases. Today, only a very few of the APC houses survive as signifiers of the history they hold.

1.2 Development of the State's Economic Potential

Beginning about thirty years after the American Revolution,[22] the rivers in the Southeastern United States fostered and guided the growth of settlements during the westward expansion from the new state of Georgia into the Mississippi Territory, which

[20] Christ, 41.

[21] See Chapter 4 for information on international physicians' meetings at the APC camps and Chapter 5 for more in-depth discussion of the conferences.

[22] In 1805 and 1806, Native American cessations opened northern and western areas of Alabama to Whites. West Florida was annexed in two parcels from Spain in 1810 and 1813. In 1814 at the end of the Creek Indian War, the Treaty of Fort Jackson opened 23 million acres in Alabama to settlement by Whites.

would later be split into the states of Alabama and Mississippi. The rivers provided the most efficient means of transport and travel, but travel by riverboat steamers was limited by untraversable rapids where the rivers met the "fall line," an imaginary line representing the junction of the flat bottomlands and the foothills of the Appalachians Mountains. In Alabama, these junctures became the settlements of important territorial towns such as Demopolis, Athens, and Enterprise, whose new inhabitants modified the rivers and surrounding lands to enhance the economic and social development of their settlements.

Birmingham was created at the intersection of two major railway lines completed after the Civil War[23] and was incorporated on December 19, 1871. Investors promoted the new city heavily, enticing many Southern farmers, Northerners, and European immigrants to relocate; however, the Panic of 1873 (a Western economic depression) closed the Oxmoor (opened 1863) and McElwain (opened 1864) ironworks and nearly bankrupted the Louisville and Nashville Railroad.[24] A cholera epidemic decimated the city the same year, and it was only through the sheer determination of its inhabitants that the new city endured.

Local ironmasters, experimenting with ways to produce higher-quality iron with locally coked coal (an improvement over charcoal that resulted in improved yield),

[23] Marjorie Longenecker White, *The Birmingham District, An Industrial History and Guide* (Birmingham: Birmingham Historical Society, First National Bank of Birmingham, Junior League of Birmingham, Publishers, 1981), 33, 42–44. These were the Alabama and Chattanooga Railroad, completed in 1870, and the North and South Railroad, which with financial help from the Louisville and Nashville Railroad was completed in 1872. Though the ore fields were known to exist since Professor Michael Tuomey, the first state geologist, mapped them in 1848, and the state had chartered two new railroad companies, the war interfered with their completion. It was not until the Elyton Land Company was formed that Birmingham began to become a reality.

[24] White, 41.

spurred the mining of the local coal reserves. Henry DeBardeleben, a prominent figure in Birmingham history and an energetic and ingenious promoter who attracted other investors to Birmingham, joined forces in 1878 with mining engineer Truman Aldrich and L&N Railroad President James Withers Sloss to form the Pratt Coal and Coke Company. Soon, a concentration of new furnaces and mills along the railroad tracks proved Birmingham was booming. So many skilled and unskilled laborers moved to the city that in its first fifteen years, Birmingham had grown from farmland to an industrial center of almost 20,000. By 1890, the population, including the surrounding county, had grown to 88,501. Of these, "an estimated 21,400 worked in the furnaces, rolling mills, foundries, and mines."[25]

The proximity and great amounts of the three major components of iron and steel making, coal, iron ore, and limestone, and the phenomenal growth of the rail industry in the area ensured Birmingham's place in the world as the cheapest supplier of pig iron that Birmingham suppliers could produce so efficiently that "it undersold English pig iron in England, and 90 percent of Birmingham iron was sold in the north or abroad because there was little market for it locally."[26] There was essentially no production of other iron products; however, although there were large cloth mills producing along the rivers in eastern Alabama, these were dwarfed in comparison with the steel mills in Birmingham.

A second phase of development began during the late nineteenth century and continued into the twentieth century when all the major rivers of Alabama were either harnessed for steam power plants or dammed to produce hydroelectric power. Electricity

[25] White, 47–48.

[26] White, 52–53.

was distributed first to major cities and later with the coming of the Great Depression and the REA, even to the sparsely populated farms along the river bottomlands. In central Alabama, this new phase of development began in 1905 with the damming of the major rivers to produce hydroelectric power by the APC.

1.3 Developed for the Service of Alabama

The most informative and complete source of information about the history of the APC can be found in Leah Rawls' *Atkins' Developed for the Service of Alabama, The Centennial History of the APC 1906–2006,* published by the APC. Atkins, a retired history professor, published several books about Alabama subjects; she co-authored *Alabama: The History of a Deep-South State,* which was nominated for a Pulitzer Prize. In her history of the APC, Atkins writes about the economic development of the state through the provision of thousands of jobs for men and women, the adoption of cutting-edge technology, and the promotion of education, that were all so much a part of the APC investors' and directors' vision for Alabama. Atkins traces the expansion of the APC from its beginnings at Lay Dam into north Alabama, and then to the central part of the state and afterwards into the Mobile area, making it one of the most advanced rural electrification programs in the country. She then delves into the special challenges to the company coming from national economic concerns and the threat of government-subsidized New Deal projects such as the Tennessee Valley Authority and REA. She shows how the APC responded to demands for extra power generation during wars, even sending power to the Tennessee Valley because of drought and a lack of completed power generation facilities there during World War I, and how the company's culture has spread through generations of workers and their families up to the present day.

I consulted *Developed for the Service of Alabama* frequently for this dissertation, particularly for information about the founders of the company and its earliest history. However, Atkins does not discuss the worker camps or construction sites. Therefore, my intention here is to add to the great body of information so persuasively recorded by Atkins.

A brief review of the histories of hydroelectric dams in surrounding states revealed that although some predated the APC, only in Alabama were the dams all built by one large power company that foresaw the future potential of the state's natural resources. This study concentrates on the architecture of company camps built by the APC to house the workers building its hydroelectric dams. These camps include the five selected to serve as examples of the other APC construction camps that were not examined in this dissertation. The sites were chosen for their proximity in both time and place, and several topics common to all five sites have been mined for data concerning the advances made over time in the quality of living and the use of materials, labor, and the social structures of the era. These were planned villages built for and by the workers of the construction crews and later used by the engineers who serviced and operated the dams and their families, consecutively, up until the advent of a network of paved roads and personal automobiles made such villages obsolete.

This dissertation evaluates the evolving responses of one owner, the APC, to the needs of the inhabitants of five such ephemeral towns, which were built on the sites of remarkable construction projects situated at a distance from established cities or large towns. To position this recounting of the history of one large corporation's efforts to

provide for its employees' lives and the construction of hydraulic power plants in the wilds of Alabama, it is necessary to introduce some background material.

1.4 Cities in the Wilderness

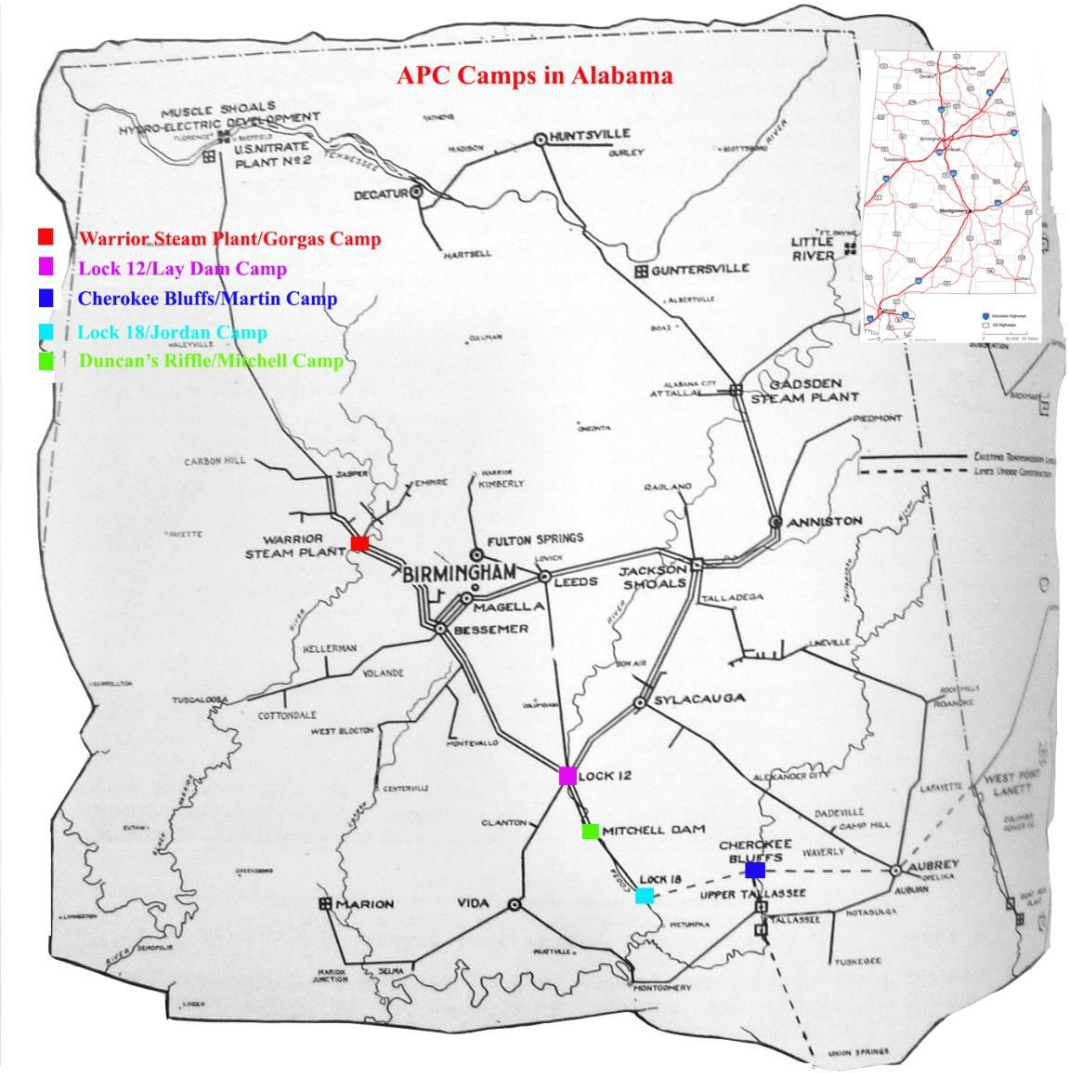

Figure 1.1 Modified map of selected APC Camps in Alabama in 1923 discussed in this dissertation. Powergrams, September 1923 APC Archives.

First, it should be made clear that the cities in the forests (Figure 1.1) that the APC built were not proper cities. They were commonly called "camps." Although the camps contained the necessities of living, shopping, recreation, entertainment, and religious

spaces, they did not have a local government or collect taxes to pay for the upkeep of city infrastructure. These functions were performed by the APC through a hierarchy of management from the board of directors on down to the foremen and superintendents who oversaw not only the work performed on the dam and in the camp but also the general demeanor of the camp residents. The camps themselves were planned to help transform the rugged Alabama terrain and flood-prone rivers into a beautifully serene and productive resource for the people and industries of the state and to make a profit. These camps were planned to last only for the few years needed for the construction of the dams. When the construction of the new power plant was completed, only a few men and their families remained on the job to oversee the production of electric power. These men were engineers, highly skilled college graduates who earned enough income to own an automobile and to commute to the nearest town for groceries and entertainment or even to live in that town and drive daily to work at the dam. Only a few of the finer houses were expected to remain as employee residences after the impounded lake reached its designed potential for electric power distribution. Therefore, the camps were intended to be ephemeral.

The scale of these construction projects was remarkable in comparison to other company towns in the state, even in the nation, in this era. Though the region was home to numerous iron and steel production facilities and the coal and iron mining towns that supplied their demands for raw materials, the concrete dams were enormous. The APC's vision was extreme in its planned obsolescence of the camps but also far-sighted and accurate. New company towns had to be constructed in the rural areas where nothing had ever been built because the unfriendly terrain had not allowed farming, and the

construction of a town would have seemed an impossibility to any but a visionary board of directors who had the necessary financial backing. The construction of the massive concrete dams and their powerful turbines would bring new life to sections of a state that had been left behind by the big manufacturing centers growing around the state's largest city, Birmingham, and secondary centers such as Montgomery, the state capital, and Mobile, an international port. Supplying inexpensive electrical power to the rural regions and economic centers would help bring Alabama forward into the bright future imagined by the company directors while raising the standard of living of families across the state and extending the director's new model into Mississippi and Georgia. Without the company towns that made the construction of the new hydroelectric dams possible, none of this could have happened in the early twentieth century in the Deep South state of Alabama.

The text below provides some background information on the dam sites that are the focus of the succeeding chapters. The short histories of the dam and construction camps are provided in the order in which their initial construction phase was completed. These histories are intended to set the stage for closer observations of the physical changes over time in the successive camps and to show how each had its own set of conditions impacting the design and use of the camps. New methods for generating the envisioned environment for the employees of the APC were tested, and the best ideas taken forward to the next site. As the APC designers', managers', and directors' visions matured, so did the camp layouts and hierarchies of placement, building typologies, and methods of accomplishing the desired changes. These initial descriptions are intended to fix in the reader's mind the theaters in which these changes would occur.

1.4.1 Lock 12/Lay Dam: 1910 to 1914

When Lay Dam was completed, the contractor, McArthur Brothers, filed a report of the construction history. The contract was a "cost-plus-a-fixed-fee type where the APC engineering department had unlimited powers in the direction of the work and exercised close supervision over all its details."[27] This document spans 1912–1915 and tells of the experiences gained during the construction of the first hydroelectric power plant in Alabama. Section B of the construction history discusses methods adopted for handling the work and the materials used in the layout and construction of the dam and the construction camp where the workers were housed during the construction phases. This is the most complete resource for reconstructing the process of building the camp and dam. Most of the information contained in this section on Lay Dam was collected from Section B of the construction history.

The dam itself was not remarkable for its construction, use of materials, or time to completion (Figures 1.2 and 1.3). There were no great difficulties in the construction, but it represented the latest improvements in equipment for developing waterpower under low heads of water. (This dam had 68 feet of head, meaning that the water level behind the dam was 68 feet above the turbine that generated electricity as it spun under the pressure of the water falling through it.) A paper written for the annual publication of the American Society of Civil Engineers claimed that Lay Dam also exhibited "the latest

[27] A.C. Polk and E.L. Sayers, "The Lock 12 Development of the Alabama Power Co, Coosa River, Alabama," reprinted from the *Transactions of the American Society of Civil Engineers*, 77 (1915), 1409 – 1581. Sayers was Assistant Chief Engineer and Polk was Resident Engineer, working for the APC at Lock 12. Sayers and Polk may have been the authors of the Construction History Report; certainly, this publication was a word for word copy in many parts.

features in turbine design, modern methods of transmission of high potential current, and methods of construction that have been tried and found successful."[28]

The learning curve was quite steep for McArthur Brothers and the APC at Lay Dam, but the lessons learned in this first essay into building cities in the wilderness were taken seriously. Each new camp provided new opportunities for an improvement of the model, and the APC planners and designers responded to new challenges as best they knew how. As the collective experience grew, so did the speed and proficiency with which new problems were solved. APC planners and designers were also fortunate to have the officers of the company on their side and to have no lumbering government protocols to slow down their response times.

[28] Polk and Sayers. Although Polk and Sayers proved to be helpful in locating a plat of the construction site, the larger camp is not detailed, only the Zion Quarry, which supplied rock and gravel for the construction of the dam.

Figure 1.2 Lay Dam, 2-4-1936

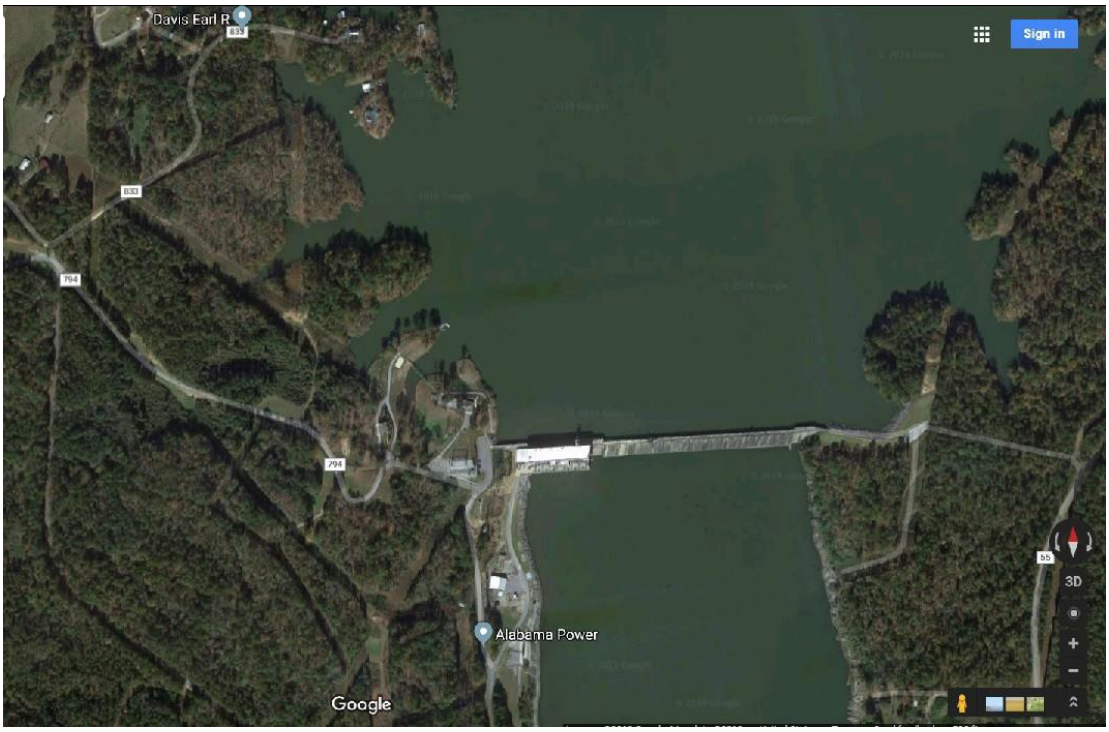

Figure 1.3 Lay Dam, Google image 1-6-2019.

1.4.2 Warrior Steam Plant/ Gorgas Steam Plan: 1916 to 1917

After Lay Dam began sending out electricity to the APC customers in August of 1914, the demand for power increased so rapidly that the APC had to construct a second power-producing plant within only two years. Because the turbines at Lay Dam produced 110,000 horsepower (82,026 kW) during peak water flow, but output would dwindle to 26,000 kW during periods of drought, steam-driven turbines were planned to make up the difference. Company engineers identified a site near Birmingham, APC's biggest market, which had an abundant supply of water and coal already under production (Figures 1.4 and 1.5). The land was purchased from the Winona Coal Company in 1916. By August of 1917, the initial Gorgas steam plant and construction camp were completed; during the following year, more housing was added, including eight two-family cottages erected to

the west of the original coal mining camp across Baker's Creek.[29] Construction progressed quickly because the United States had entered WWI on April 16, 1917. When politicians decided to construct a nitrate plant at Muscle Shoals to produce weapons, the federal government ordered the APC to supply power to the nitrate plant. After a great deal of political wrangling, the APC board acquiesced, framing their relinquishment of their plant at Gorgas as a matter of patriotic pride and a contribution to the war effort. It was initially a popular move as was made clear in multiple *Powergrams* articles and cartoons and in industrial media.[30] Because of its relative proximity to Muscle Shoals, Gorgas was partially funded by the federal government, and additional workers were added to get the second boiler at the plant online quickly.[31]

[29] Frank M. Morgan, "Gorgas Plant to Be Completed," *Powergrams,* January1924, 6–7. These houses were built of re-sawed siding and had composition roofs.

[30] R.D. Coombs, "Salvaging a War Contract" in *Electrical World*, February 10, 1923, 327–330. Gorgas was attractive both for its proximity and for the fact that it operated so efficiently because of its local source of coal to power the steam plant. APC had planned for future expansions by broadening the foundations, water intakes, and discharge culverts beyond what was initially needed. The plant was, therefore, "commandeered" from APC according to Coombs, who was the consulting engineer (out of New York) who planned the transmission lines from Gorgas to the new nitrate plant. Coombs also noted that when the new nitrate plant was no longer needed, "the government built a steam plant of approximately twice the size of the Gorgas plant. This plant was never used and would have been idle now had not the power companies leased it from the government and distributed its power over their systems."

[31] Morgan.

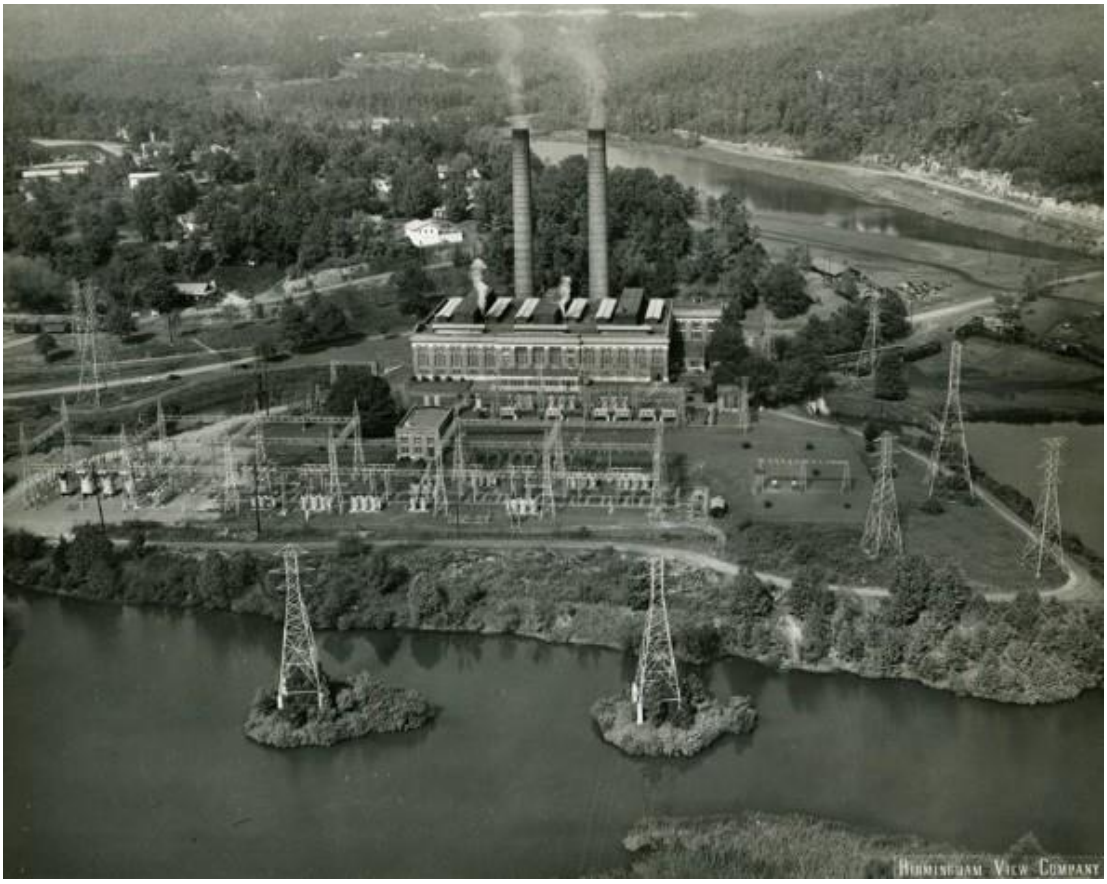

Figure 1.4 Aerial View of Gorgas, 1918.

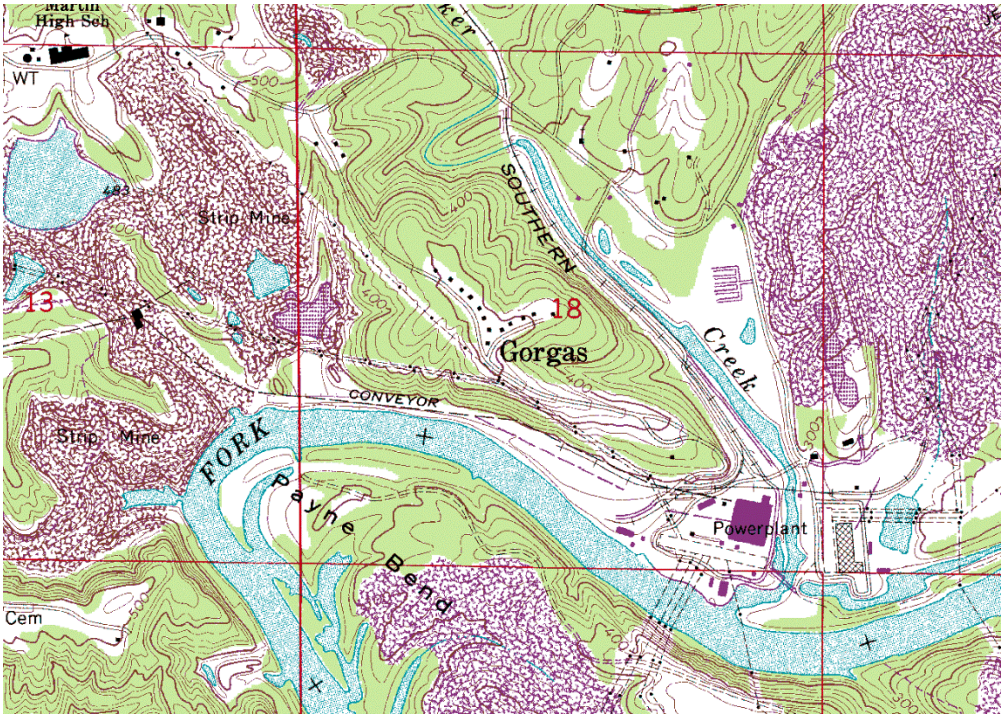

Figure 1.5 Gorgas. USGS topo 2014.

The construction of the nitrate plant needed power, and Gorgas was the closest producer. Exhibiting great national pride, the APC withdrew its order for construction materials and equipment and relinquished the intake and discharge canals and underwater foundations to the government. Acting as a construction agent, the APC installed a 40,000-horsepower unit for the US government and the necessary transmission lines to convey the power to Muscle Shoals. The APC retained an option to purchase this equipment after the war and did so in September of 1923.[32]

In January of 1924, *Powergrams* reported that permission had been granted by the Public Service Commission for the third unit to be installed at Gorgas. The addition of

[32] Morgan.

the third unit made the Gorgas plant "one of the country's largest producers of steam power, with a total output of 70,000 kW or 94,000 horsepower."[33]

The Gorgas plant, like all the other APC power plants, is operated remotely from the Birmingham offices now, but many of the homes and a few of the other structures remain in Gorgas because of the need for coal to fire the boilers.

1.4.3 Ducan's Riffle/Mitchell Dam: 1921 to 1923

The common labor force was much easier to "acquire at satisfactory rates" on July 1, 1921, when work commenced on the Mitchell Dam site because there was little other construction work being done in the district, providing an "opportunity to choose experienced men best fitted for the work (Figures 1.6 and 1.7). The closing down of the power project at Muscle Shoals released many men experienced in this type of work, and many foremen were chosen from the Wilson Dam operation," wrote L. V. Branch, resident engineer, in 1921.[34] The steel industry was experiencing a severe depression at this time, so it was possible to find skilled and unskilled labor at pay scales lower than the year before. The larger proportion of skilled labor came from Birmingham, which was most affected by the steel mill slowdown. Unskilled labor came from Birmingham, Montgomery, areas surrounding the site, and Mobile because the shipbuilding industry was suffering as well. The number of people on DCC's rolls reached a maximum of 1,256 in December of 1921, and the turnover rate was low. This rate was "decreasing with the increasing housing facilities."[35] One reason given was that men did not want to

[33] Morgan.

[34] L.V. Branch, *DCC Annual Report 1921, Mitchell Dam.* March 25, 1922. Passim, no page numbers were used.

[35] Branch, cover page.

jeopardize their families' welfare. The same conditions applied to the availability of supplies, which were always locally procured when available so prices were down. Six lumber mills were in operation within the basin, sawing all types of lumber needed for construction, and this was delivered to the construction site and stockpiled for use as needed, which resulted in the work being completed ahead of schedule. Men were happy to have work, and production was high.

Figure 1.3 Mitchell Dam, photo by author, 3-18-2012.

Figure 1.4 Mitchell Dam, Google Maps 1-6-2019

The work performed at Duncan's Riffle/Mitchell Dam was similar to that at a typical APC dam construction project. In 1921, this work consisted of clearing the reservoir (a total of 360 acres closest to the lumber mills, representing only 14.7 percent of the total to be cleared), cutting and sawing lumber for the cofferdam, trestle, barges, and other items necessary to the work, transporting lumber on the river via barge or rafts, and preventing malaria. At Mitchell, fifty-two "malaria pools" were created and stocked with 52,000 Gambusia, fish that would consume the malaria larvae and reduce the risk of mosquito bites. When the lake level rose above the level of the pools, the growing fish would swim out to populate and protect the shallow waters of the new lake. These pools were inspected by representatives of the federal government and the State Board of Health. The approach was expected to alleviate the risk for both employees and those living in the general area, but employees were also required to take regular

allopathic treatments when mosquitos were active (which is most of the year in Alabama.)

The cost per pool, including feeding and inspection, was figured at $122.00.[19] The dam was put in service on August 15, 1923.

1.4.4 Cherokee Bluffs/ Martin Dam: 1923 to 1926

Work began at Cherokee Bluffs on July 24, 1923 on what was to be the highest dam in the South (120 feet from the base to top of the crest gates) and the largest body of water in the state (at over 25,000,000,000 cubic feet of water, or 25,000 acres; see Figures 1.8 and 1.9). When he was prospecting for suitable investments, James Mitchell, the Canadian-born electric power developer, had set his sights on the Cherokee Bluffs site even before he had gone into a partnership with Thomas H. Martin and William Patrick Lay to form the Alabama Traction, Light and Power Company (later the APC). However, this was not the first site developed because of legal problems with other power generating companies downriver. The problems were eventually worked out, and the project was put in service on December 21, 1926.

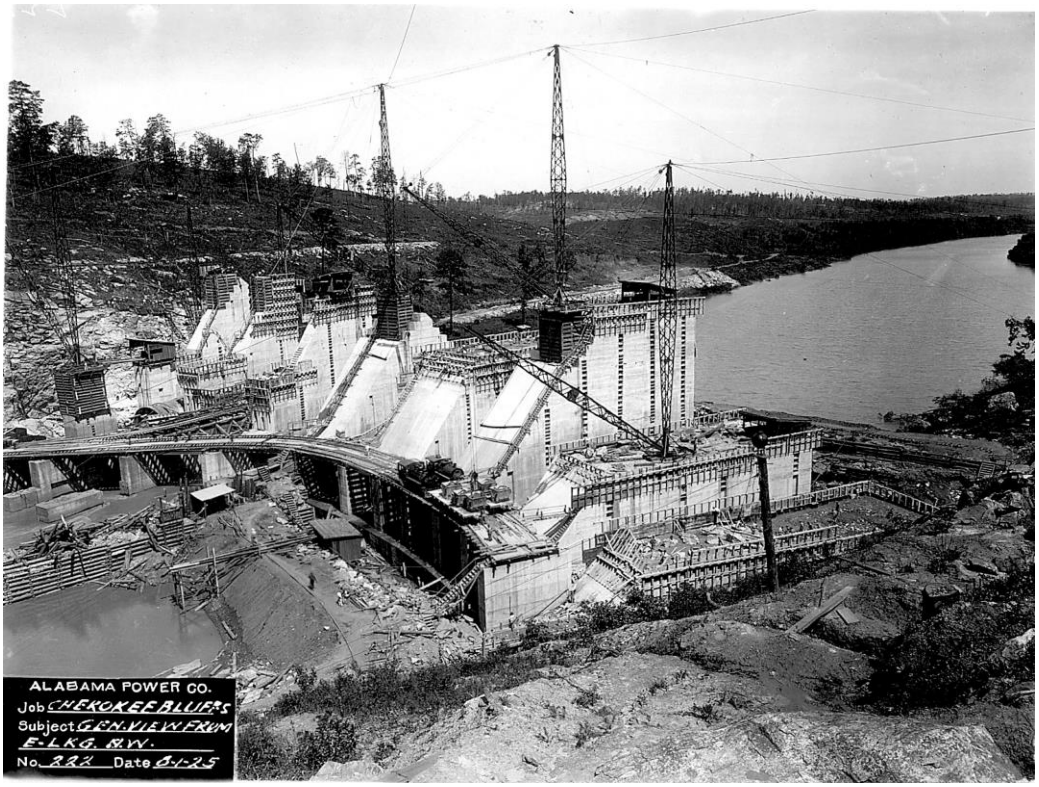

Figure 1.8 Martin Dam under Construction at Cherokee Bluffs, 8-1-1925.

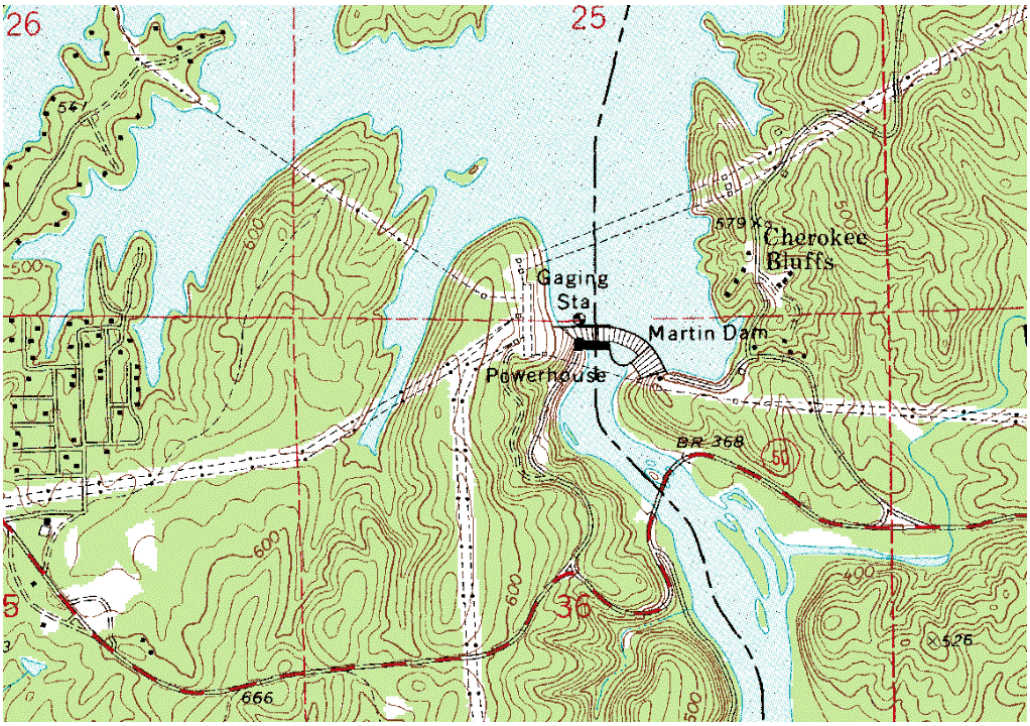

Figure 1.9 Martin Dam, USGS Red Hill Quadrangle topo, 1971.

1.4.5 Lock 18/ Jordan Dam: 1926 to 1928

In 1912, the APC sought the consent of the US Congress for the construction of another large hydroelectric plant at Lock 18 (Jordan Dam, see Figures 1.10 and 1.11). Rivers and streams were managed by congress as a national resource, so permission had to be given to dam the river. The river would be impassible unless a lock was installed in the dam. Congress later passed the bill, but there was opposition in Washington, and President Taft vetoed it.[36] Later, plans were approved by the US Army Corps of Engineers and under license by the Federal Power Commission because a certificate of convenience and the necessity shown by the Alabama Public Service Commission, the project was begun.[37] In 1925, APC President Tom Martin announced that the company was anticipating, as best it could, the public need for lighting and power service. He predicted that within ten years the state would be using 1.5 billion kilowatt hours, over twice the volume in 1925. To meet this demand, work at Jordan Dam was to be "pushed as rapidly as possible," and the plant at Martin Dam was expected to be completed in 1926. It was further expected that the Jordan Dam plant should be up and operating by December 1928. The construction was begun on June 15, 1926, and the dam was put in service on December 31, 1928 with a plan for the future inclusion of a lock, as indicated in a note on a photograph (Figure 1.10, circa 1928.) By January, 1927, the entire Martin Dam organization including workers, managers, and engineers would be transferred to

[36] "Power Co. to Construct $13,000,000 Plant on Coosa River," *Powergrams*, November, 1925, 15–16. It was not until the Federal Waterpower Act was passed in 1920 that the APC was able to proceed with plans for the hydraulic power plant at the old Lock 18 location. See also, F. G. Switzer, "The Lock 18 Development" *Powergrams*, July, 1925, 8. This dam is "an important step forward. The pool formed by the Lock 18 dam will add 18 miles to the navigable length of the Coosa River." Congress was still pursuing the plan to make the Coosa navigable to Rome, GA.

[37] *DCC Report Narrative*, 1926, 5.

Jordan Dam to ensure the completion on schedule.[38] Pointedly reminding the employees of their status as avatars of the future, an article in *Powergrams* stated that part of the overall plan of the APC was to supply "cheap, reliable, and abundant" power to "the manufacturer, the farmer and all classes who are users of electricity."[39] As much as possible, the APC would locally purchase commodities necessary for the production of a power plant and pay taxes, helping local schools, road building, and the general population in so many ways.[40] In this way, the APC would further fulfill its intended objective of bringing the state of Alabama out of its agrarian past and into the future of manufacturing and business.

Figure 1.10 Aerial View Jordan Dam, USGS, 1941.

[38] H. A. Powell, "Progress at Lock 18," *Powergrams*, July, 1927, 7.

[39] Powell.

[40] Powell, 16.

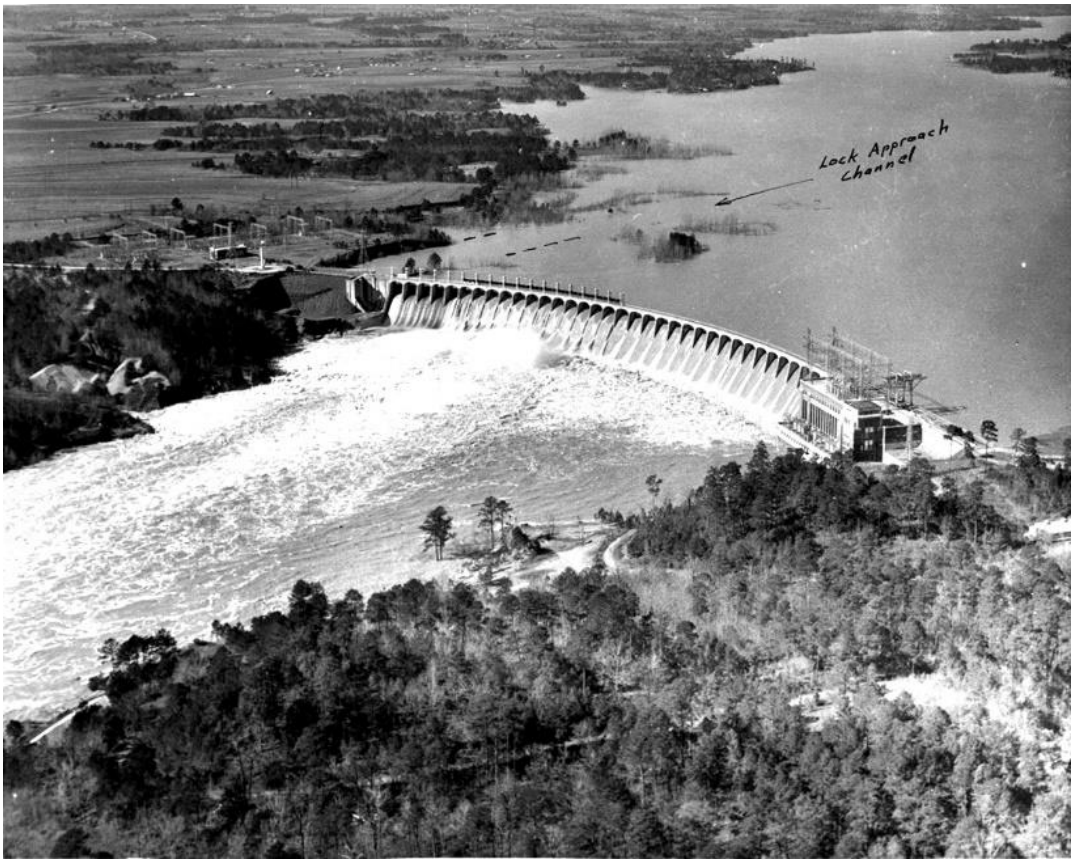

Figure 1.11 Jordan Dam with Lock Approach Channel Indicated, c.1928.

The site at Jordan Dam had been identified by the United States Army Corps of Engineers (USACE) as the location for Lock 18 in 1912, but work on the lock and dam did not proceed. The site was located at the fabled Devil's Staircase, where the setting included a series of shoals so monstrous that it seemed impossible to do anything except dig a canal around it.[41] Finally, in 1926, the APC announced it would build a $15 million facility just north of the city of Wetumpka, employing more than a thousand men, many of whom had experience working on the Martin Dam for the same general contractor

[41] Harvey H. Jackson, *Putting "Loafing Streams" to Work, The Building of Lay, Mitchell, Martin and Jordan Dams, 1910–1029* (Tuscaloosa, AL: The University of Alabama Press), 157.

headed by C.C. ("Careful Charlie") Davis of the Dixie Construction Company. These men were trained and ready to work; their health records were on file, and they were anxious to put up their "U-build" houses and move in. Others found lodging in Wetumpka, only a six-mile walk away.[42]

The APC bought the land and local crews were hired to work along with the experienced sawyers and skidder crews who cleared the land. Following the same practices as at other APC dams, the lumber was harvested and milled on-site to be used in the construction of cofferdams and formwork for the dam itself[43] as well as building parts of the company village.

The camp was located on the east side of the river since it was there that the shade trees and availability of well-drained ground were found. Because the west side of the river was fourteen miles closer to Birmingham and was the lower elevation that had previously been under cultivation, it would present fewer obstacles to the delivery of the aggregate and cement by rail; therefore, the concrete plant was placed on the west side. This meant that an additional bridge would be needed for access to the east side of the river, but the expense was justified by the fact that it would open up much-needed space on the west side for other plant facilities nearer the dam site.[44]

When Jordan Dam was completed (1929), "it was the largest power project undertaken by private capital in the South."[45] The camp was completed in June 1926 and

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[42] Jackson, *"Loafing Streams,"* 129, 158.

[43] Jackson, *"Loafing Streams,"* 161.

[44] *DCC Report Narrative*, 1926.

[45] Jackson, *"Loafing Streams,"* 203.

occupied by December 1926.[46] As usual, at the end of the construction period, the camp was turned over to the APC for use by its employees who had permanent positions maintaining the dam and producing the electrical power for the state and people of Alabama. Jordan Dam is the only hydropower facility on the Coosa that has a minimum flow requirement. None of the dams on the Coosa have fish passage facilities, an indication of their less than up-to-date status in the electric power industry. (This is not unusual. The United States has many old hydraulic plants still in production.) In today's world, other forms of power are seen as more productive and efficient, but the hydraulic generation of power is still an important source of affordable, clean energy.

1.5 Unexpected Results

Some unexpected discoveries happened while I was looking at the photographs made by the professional photographers who documented the camps for the owner, APC. Sometimes these discoveries were supported by evidence in other photos and sometimes via textural verification. Although several of the images seem posed by the photographer for best effect, some are so casually composed that they are more like the snapshots of a novice. In any case, they do help to give a sense of the daily lives of the inhabitants of the APC camps.

An example of the information that can be gleaned from the photographic documentation is shown at Jordan Dam during 1926 and 1927. A Model T Ford Coupe is parked by the side of the commissary (Figure 1.12). Automobiles were becoming more popular in largely rural Alabama by 1926, but they would not have been something a construction worker could afford. Starting at $520 FOB Detroit for the most basic

[46] Warren, L. G. "First Unit at Jordan Dam Is 'On The Line,'" Powergrams, September, 1928, 5.

model,[47] the 1926 Model T Coupe was probably also out of reach for most of the engineers working at the dam. Bricklayers were among the highest-paid skilled workers at $1.25 per hour, or $50.00 per week,[48] but the pay of engineers must have been only a little better. Engineer's pay was not recorded in the DCC Reports as they were employed directly by the APC. The APC did employ photographers to document the work at the camps, and they must have visited on a regular rotation judging by the number of photos preserved in the archives.[49]

[46] "1926 Model T Coupe," http://www.american-automobiles.com/Ford/1926-Ford.html, accessed October 27, 2018.

[47] *DCC Construction History Reports*, January 1, 1927, 164, and *DCC Construction History Reposts*, January 1, 1928, 165. The following year (1927) no bricklayers were employed at Jordan Dam, their work having been completed the year before.

[48] Many of the photos in the APC Archives were made by "Anything Photographic, Flashlights and Kodak Finishing," located at 121 ½ 21st Street, Phone Main 5090, Birmingham, Alabama. Other images supplied by "A.C. Keily, Commercial View Man, Anything Photographic" with the same address. Two Keilys, a father and son, were the photographers of many Birmingham area landmarks and did business in Birmingham between 1910 and 1970. The name appears on so many of the images in the archives that they must have had a contract to document all the work. For more information, see https://www.bhamwiki.com/w/A._C._Keily.

Figure 1.12 Jordan Dam Commissary 12-1-1926.

This photographer was probably the owner of the automobile being admired by the men leaning against the building (Figure 1.12), and the same auto can be seen in other photos made on the same day around camp (Figure 1.13). In the following year, we see the much less expensive Ford Model T Touring car parked by the superintendent's house (Figure 1.14) The superintendent probably could afford such an automobile and may have had an additional allowance from the company to drive to Birmingham for board meetings or to make reports in person.

Figure 1.13 Jordan Camp/Lock 18, cottage west row, 12-1-1926.

Figure 1.14 Superintendent's House, Lock 18, 7-10-1927.

The APC documentation of its construction projects gives a writer an opportunity like that afforded by a first-person interview, once removed, except that here the interpretation is up to the viewer/writer since the photo gives an original perspective from the point of view of the photographer, who cannot be interviewed. The documentation of the work scenes and more tranquil life portrayed in these images may have had an agenda, but it appears to have been only the documentation of the built environment. Sometimes we can investigate the peripheral distances in these photos and see information other than that which was intentionally documented to find clues to the pace of life in the camps such as the photographer's automobile.

What can be most often observed in the photos are neat, clean, and attractive houses and yards/gardens that speak both pride of the presentation of people's homes and the care taken by the APC to plan for the photographer's visit. Additionally, there were the contests held each year for cash prizes and recognition in *Powergrams* for the best camp, cleanest house, and most productive garden that gave the White residents a reason to maintain their homes to a higher standard.[50] The photos in the Archives and the *Powergrams* all carefully point to the fact that camp residents were healthy and happy with their jobs. That the camps were used as flagships for the company's own publicity campaigns seems to have been just fine with the White employees, who were carefully trained to be proud of their company in such subtle ways.

[50] Only the White camps are photographed with any frequency and that probably means the Black camps were not so well maintained. However, the Black camps were even more temporary than the White camps and were unlikely to have had visitors come to admire them. These photos were carefully staged by the company photographers and those professional photographers who were contracted by the company.

CHAPTER 2. ISSUES, METHODS, AND SOURCES

Students of architectural history are better able to understand the built environment when they also are taught about the culture of the region in which an architectural expression is found. The student learns that cultures evolve based upon the availability of suitable building materials that derive from or respond to the local natural environment as well as the creativity and skill of the craftsmen who shape the built environment. Vitruvius tells us that architects of ancient times designed and built war machines when their states fought with another. Building typically slows down during wars, whereas in booming economies, architects have much work. An understanding of the local economy and trade partners, religious views, leadership, and social practices of a societal group helps to identify who is building what and why they are doing so. Therefore, formal analysis of structures along with contemporary social analysis helps to explain (even in building artifacts no longer extant), the conditions of life for a given society. Typically, the materials found nearby are the most economical. They also predetermine to some extent the form a structure will take. Needs for security and protection from the elements evolve as the forms and construction techniques are perfected, and the identity of the social group becomes bound up with these forms.

The key research question of the dissertation centers on the way architecture mediates the relationship between an institution (the APC) and the individuals it needs to employ to achieve the scope of its ambitions. The APC wished to please its investors by making money and by helping Alabama grow its newly emerging manufacturing economy, which would then become a large new market for its electric power. This goal

was achieved. Secondarily, the newly manufactured needs of the people would be served, providing previously unimagined improvements in their lifestyle and comfort. Most of the infrastructural improvement happened immediately before and during the Great Depression, so the APC was able to put many men to work at a time when jobs were scarce.

This dissertation focuses specifically on architectural form, materials, and construction techniques, but the examination of contemporary conceptions of race, class, and gender allow an analysis of habits of thought and political/social structures that organized the lives of different groups in relation to one another during this period. The architecture of the specific sites and building types addressed herein is both an expression of its physical place and its place in history, so questions of siting, materials, and plan types on the one hand, and corporate capitalism, segregation, and the consequences of relative density and durability on the other, must be examined to set the stage for a larger discourse in the future.

The camps themselves were not remarkably different from other sites such as the cotton mill villages of the Piedmont region or the steel and iron mills and their villages around Birmingham. The camp structures' sizes and styles are quite typical for the times and locations in which they occurred. What is different is the reoccurrence of the same construction projects at new sites and the improvement in the quality of the homes, schools, and hospitals in the most rural situations, in large part through the communication between the company engineers and draftsmen and the construction workers in the field. Everyone was learning by doing, but the carpenters clearly passed these lessons on in their requests for modifications or redesigns undertaken on the job.

The APC construction process was repeated many times in the course of building the construction camps, and that is one of the unique aspects that attracted my interest. None of these camps was a one-off for a client who intended to make their fortune with a single factory in a single location. Here we can evaluate the processes and changes within a company over time.

The houses are the most important part of this puzzle because, without them, there would be no crews of workmen ready to build the formwork and mix the concrete for the dam. The houses do not stand alone, of course; the schools, mess halls, commissaries, churches, and entertainment venues were all necessary to support the function of the houses. Camps were laid out according to the topography and access to railroad lines, a plan both practical and logical that produced linear neighborhoods of similar social classes situated along the main roads. Because the populations were thus segregated from one another by the terrain, the APC worked to generate a sense of belonging and camaraderie for the longer-term employees, at least in the White camps.[51]

Although generally described as serene and hygienic, the site plans of these worker villages raise questions about the arrangement of the camps for less than carefree purposes: view sheds, whether intentionally located or not, seem to provide surveillance capabilities over the Black camps while allowing the permanent operator camps to enjoy their shaded park-like settings without constraint. This was usual for the era. At the same time, the public image of the APC meant landscaping was an important feature at the

[51] The Black camps mostly consisted of short-term laborers who were share-croppers in their former lives. Some Whites were also sharecroppers. During harvest times the sharecroppers wanted to get off work to harvest their crops and then return to their APC jobs, which paid cash for their labors. Their absenteeism created a problem with the management, who either did not understand the plight of the sharecroppers or did not care, subsequently branding the Blacks as "lazy," "no-good" or "incapable of keeping a job."

APC sites, as indicated by the numerous photographs of the flowering shrubs and neatly manicured lawns pictured in the published results of the company-wide contests for the best-maintained yards and homes.

A study of the houses also illustrates the evolution of the APC's goals for the most efficient and productive designs. One driver of the changes in house design was the technological advancement in home appliances. Of course, the APC was in the business of selling electrical power, so the later employee homes were furnished with all-electric stoves, refrigerators, water heaters, and, eventually, electric washers and dryers. Though these homes were still remotely located, they were advertisements for the sale of electric appliances across the area served by the APC, proving once again the necessity of electric service to higher living standards in their local areas.

The APC was a paternalistic employer, but not all patriarchal employers were tyrants with only the bottom line in mind. The housing supplied to the permanent operators and their families was more than adequate or expected for rural housing in Alabama in the 1920s. This was in part to keep the public image positive and the reputation of the APC bright but also to keep the workers happy and productive despite the isolated locations. Schools and hospitals also evolved according to the changing needs of the camps, demonstrating the APC's flexibility, willingness to seek alternate solutions, and understanding of how to keep their workers happy and productive and in their jobs. These responsive changes will be enumerated in the following pages.

Housing was not of the same quality or size for all the APC workers, however. We know more about the housing for the higher-status workers than for the common laborers both White and Black. The archives contain drawings for building types that

speak to the different accommodations provided from which one may infer some things about the treatment of workers. Permanent operators were one of the uppermost tiers in the camps. They were trained engineers with college degrees and were expected to stay on the job to run the plant for an indefinite time after the construction phases had been completed. Their jobs were permanent, and their housing was required to last indefinitely as well. At the other end of the spectrum, housing for Black laborers was of temporary construction, so much so that these shacks were often burned instead of relocating or reusing them for another purpose.

In addition to the comparisons with mining and steel-working villages in the Birmingham area, we will consider the context of worker housing in dam construction camps specifically since the typology can help frame a discussion of worker housing in general. Two later projects are comparable: the first TVA dam constructed on the Tennessee River at Norris, Tennessee and Boulder Dam (later renamed Hoover Dam) on the Colorado River in Nevada. The work and the villages planned for the employees at both these sites were like that of the APC camps, but there were vast differences in the way the work and the workers were managed and treated especially the housing.

2.1 Paternalism

It is at this point that we must discuss paternalism more fully. To recognize what corporate welfare looks like in the built environment, one must understand the various forms it might take; sometimes it is overt, but at others, it's almost unnoticeable. Different forms of discrimination come along with paternalism. We can compare textile mill workers and convict laborers in relation to class, social, economic discrimination, and the concept of Whiteness as social capital as it was practiced in the American South.

Unionization was a persistently appealing option for textile mill workers in the 1930s, but the mill hands found ways around the control of both the unions and their employers. For example, in "Rethinking Paternalism," Mary Lethert Winegerd relates how in the summer of 1934 a general strike of over 170,000 southern mill hands joined in protest with operatives of Mill 1 of the Erwin Mills Company in Durham, North Carolina. Erwin's Mill 2 in the town of Erwin eighty miles south of Durham also struck but Mill 3 in Couleemee in the western piedmont did not strike.[52] The workers of Mill 3 in their isolated village may not have had direct knowledge of the plans of their colleagues. These mill workers also felt a solidarity with their supervisors, who worshipped at the same churches and shopped at the same stores, obligating both sides in an unequal social contract.[53]

Another reason for not striking may have been that the lands owned by Erwin Mills around Mill #3 were made available to the workers for the use of livestock, large-scale gardening, and common woodlots, and the workers were free to hunt and fish. Although they had left their farms and taken up wage-work, the mill hands were allowed a sense of self-sufficiency, and at least a part of their pre-industrial lives was maintained. This is like the treatment of the APC workers, who were encouraged to play on company intramural baseball teams, to hunt and fish in their naturally abundant environs, and even to ride a special train down from the Birmingham offices for a weekend retreat. The management lived in bigger, more fancy houses, but they were still in the same isolated

[52] Mary Lether Winegerd, "Rethinking Paternalism: Power and Parochialism in a Southern Mill Village," *The Journal of American History*, December 1996, 872–902. 222.jstor.org/stable/2945643, accessed March 12, 2019, 872.

[53] Eventually, there was a strike at Mill #3.

camps in Alabama. Both companies made an investment in the recreational lives of some of their workers that protected against dissent.

Winegerd concluded that paternalism arose as a justification, not a foundation for the labor relations in place at Mill #3. The workers had negotiating leverage, but it was effective only so long as the management felt a stable, settled workforce was a priority.[54] Like the APC's intention of home-growing a larger market for their product, mill owners James and Benjamin Duke opened Duke Power Company and advertised Erwin Mills as an exemplary labor force to entice industries that would provide future customers for Duke Power.[55] Paternalism thus took on the trappings of an economic driver even as it posed as a cultural blessing.

It is a trope of scholarship on the South that mill hands and other working groups have had a long history of subservience to authority and dependence on their employers growing out of their histories: the defeat of the Confederacy, the subsequent long years of Reconstruction, and the loss of their farms, culminating with the hopelessness of the Great Depression. However, David Carleton spoke against such a broad interpretation of class relations in the South, citing the work of Philip Scranton, who published his work in the *American Quarterly.* Scranton described "familiar paternalism" as closely tied to small undercapitalized rural firms seeking to gather and hold a workforce while conserving scarce capital through such strategies as "scrip payment and the company store." Familiar paternalism allowed social and economic control over workers because it

[54] Winegerd, 885.

[55] Winegerd, 877.

"encouraged in workers a sense of personal loyalty to the owner."[56] The workers of Mill 3 felt they did not need to join the strike or the union since they were socially close to their supervisors.

Some paternalistic companies were successful at maintaining their employees' trust and respect across social and color lines. Like "Uncle Charlie" DeBardelaben at the Alabama Fuel and Iron Company,[57] Donald Comer of Avondale Mills was loved by his workers. Michael Thomason wrote about the Cowikee Mills at Eufaula, Alabama (also owned by Comer), where there were "tensions between mill workers and the elite of old Eufaula, race relations and the heavy hand of discrimination and violence" against Blacks.[58] (Cotton mill workers had hard lives no matter where the location.) Comer introduced social benefits. A baseball team, bands in the schools, a Boy Scout troop and girls' clubs, and patriotic events put on by paid staff were all freely provided by Comer, who encouraged those who wanted to go to college. He was commonly found in the mills talking to workers about their needs and problems, but he still followed the racial codes of the Jim Crow South. Here, as at most other textile mills, Blacks were only hired in lowly "sweeper" jobs. It is easy to criticize, but Black and White employees alike felt he

[56] David L. Carlton, "Paternalism and Southern Textile Labor, a Historiographical Review." Chapter 2, 19–20.

[57] Please see Chapter 6 for more on the Alabama Fuel and Iron Company. The DeBardelaben family lived for two years at the Overton village when threats were made against the family by union sympathizers.

[58] Michael V. R. Thomason, reviewing David E. Alsobrook, *Southside: Eufaula's Cotton Mill Village and its People, 1890–1945*, Macon, Georgia: Mercer University Press, 2017 in The Alabama Review, October 2019, online https://muse.jhu.edu/article/742252. accessed February 22, 2019 or Thomason, Michael V. R. *Southside: Eufaula's Cotton Mill Village and its People, 1890—1945, by David E. Alsobrook." Alabama Review* 72, no. 4 (2019): 309–312. Doi:10.1353/ala.2019.0035. 311.

was a fair man, and both Blacks and Whites trusted him, so when the unions tried to come in, his employees refused to consider joining.[59]

Similarly, when the employees of DeBardelaben proposed unionization, they were told that the coal they produced was such low quality that it would no longer be profitable for the company to operate and that it would have to be shut down. The implied threat of no work was enough; the employees of Alabama Fuel and Iron Company did not join the union. Oddly, DeBardelaben's employees did not hold him accountable for this action; he was personable and seemed to genuinely care for the miner's families; he lived among them with his own family during the worst of the union troubles, and they were glad to still have jobs when other coal mining operations in the region shut their doors.[60]

The APC did eventually unionize in 1940,[61] and the management feared losing their employees to other companies. In 1934 major cutbacks in salaries due to the Depression led some of the best engineers to take employment with TVA.[62] The APC tried several means to retain its best employees, but the work was not always continuous,

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[59] Thomason, 312.

[60] The coal produced by the Alabama Fuel and Iron Company was of marginal value, only suitable for use in steam engines. The major buyer of DeBardelaben's coal were railroad companies at a time when new diesel engines were becoming more and more common. DeBardelaben knew his company's days were numbered.

[61] Atkins, 221. The International Brotherhood of Electrical Workers (IBEW) was recognized by APC in October 1940. This came after the Wagner National Labor Relations Act of 1935 and a 1937 probe by the IBEW which was intended to ascertain whether the workers at the generating plants (field employees, operators, and maintanance and construction workers) were interested in joining. The votes were close 635 against and 551 for. A grassroots effort by two new employee groups, the Alabama Power Employees Association and the Independent Union of Alabama Power Employees threatened any control the company might have had over the unionization process so when the APC learned that about 70% of employees at generating plants had already become members of IBEW, they ignored the other two groups and joined IBEU.

[62] Christ, 56.

and during the Great Depression even the APC could not afford to keep everyone. In the chapters on the built environment at the APC camps (Chapters 3 and 4), we will examine how the ideas of employee recruitment, retention, and the promotion of the company as a benevolent parent were embedded in the constructed social and built environment.

2.2 Race as a determinant of social order

Many writers of the 1990s did not address the question of whether race determined the social order that emerged. Other writers suggest that the company towns in the South are unique because of the underlying racial biases that have long permeated life there. Michelle Brattain, again studying mill workers, examined Whiteness and how it is a racial identity that "shaped working-class history and southern politics in the twentieth century," especially considering the historical context of the Jim Crow South. Her study of textile mill workers showed them to be almost exclusively White and female.[63] For Brattain, whiteness is a badge of privilege and entitlement even when the White person is unaware of possessing it. (Whites did understand it gave them special privileges although there were hierarchical relationships within whiteness too.) All Whites "had a stake in keeping the value of whiteness as high as they could" since it formed identity and facilitated political position, "but it was often unspoken, invisible and still understood, an implicit part of all southern culture," and this is why "whiteness and blackness were constantly reconstructed and reconfirmed in the South."[64] It is well known that by the dawn of the twentieth century discrimination based on color was

[63] Michelle Brattain, *The Politics of Whiteness: Race, Workers and Culture in the Modern South*, Athens: University of Georgia Press, 2004, 4.

[64] Brattain, 8, 9.

deeply embedded in the South. These conditions worked to naturalize racism so it seemed almost immutable, as if it had always existed as part of life, not a thing perpetrated by a few men with White privilege and power who wished to keep the rest under their thumbs. Most Whites never questioned the status quo.

Discrimination in employment was typical in the South. Whites were hired almost exclusively for the wage-paying jobs in steel and textile mills, though this practice was not as prevalent in construction jobs. The smaller number of jobs available to Blacks may have affected the differences between Whites and Blacks in a mill town as to class, income, and status, but according to Brattain, higher income, class, and status were always visibly afforded to Whites.[65]

Another instance of discrimination where race determined social order that should be discussed here is the policy of using convict labor in a system somewhat unique to the postbellum South. The state leased convicts (instead of housing them in prisons) to the highest bidder who might use them to do any work as long as they fed and clothed them, prevented escape, and paid the state for their work. This variation of slave labor has been examined by writers whose voices range from cautious to shrill depending on their personal points of view. In Georgia, Alexander C. Lichtenstein argued it was an unjust and corrupt method of "labor recruitment, control and exploitation particularly suited to the political economy of a post-emancipation society" and "the preservation of White

[65] Brattain, 9.

supremacy."[66] Douglas A. Blackmon has added to this discussion with written and film publications.[67]

The history of labor in the New South is quite different from that of the northern United States. It has been influenced by powerfully suggestive work by Blackmon and Lichtenstein especially in the discussions centered on the use of convict labor in industrial settings. A similar system in Northern prisons retained partial control of the convicts; the Southern system has been likened to slavery because of the demonstrable lack of concern for the convicts, most of whom were Black. Because there were many abuses of the system, notably collusions between politicians and leasers (who were often the same people), by the early twentieth century the convict lease system was abolished in most Southern states. The biggest change for the convicts was that they were now working for the states in constructing streets and maintaining highways and living in state prisons.

Douglas Blackmon wrote in *Slavery by Another Name*[68] about the many Black men legally forced into lives of slavery in Alabama and Georgia. He describes the hardships and horrors suffered through the individual experiences of real people. His book was adapted as a ninety-minute documentary film partially produced by the

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[66] Alexander C. Lichtenstein, *Twice the Work of Free Labor: The Political Economy of Convict Labor in the New South,* New York: Verso, 1996, 4. A similar system in the northern prisons retained partial control of the convicts; the southern system has been likened to slavery because of the demonstrable lack of concern for the convicts, most of whom were Black. Because there were many abuses of the system, notably collusions between politicians and lessees, who were often the same people, by the early twentieth century the convict lease system was abolished in most southern states. The biggest change for the convicts was that they were now working for the states constructing streets and maintaining highways and living in state prisons.

[67] Douglas A. Blackmon, *Slavery by Another Name, the Re-Enslavement of Black Americans from the Civil War to World War II,* New York: Doubleday, 2008.

[68] Douglas A. Blackmon, *Slavery by Another Name, the Re-Enslavement of Black Americans from the Civil War to World War II,* New York: Doubleday, 2008.

National Endowment for the Arts and aired on PBS in February 2012.[69] Blackmon has done much to bring this little-known practice to light.

Since the South was industrializing at a fast pace during Reconstruction and the New South eras, a source of reliable and predictable (i.e., controllable) labor was a problem for Southern industrialists. Newly emancipated Blacks and destitute Whites wanted work, but they wanted to be paid a fair wage. Compounding the (cheap) labor shortage, textile mills hired White workers from the Piedmont regions, so the coal and iron mines, railroad camps, brickyards, and sawmills saw the use of convict labor as a viable alternative to paying for labor as the Old South moved through an evolution of race and class relationships.[70] Adding to the problems for Black men was the fact that a small infraction in a White supremacist society could result in a long prison sentence. Once entered into a convict lease contract, a Black man was liable to remain forever since the time clock could easily be reset by White "employers."

Not only were the racial manipulators outspokenly against the Black man's advance in society, even some of the educated, respected, and most refined spoke out in support of White superiority over Blacks. Maintaining and underscoring patterns of racial segregation, manipulating the justice system, even resorting to violence and brutality, all the while promoting dehumanizing caricatures to reinforce and comfort Whites in their practices; these elitists modeled attitudes and behaviors for children of other Whites. Any

[69] "*Slavery by Another Name* official website". May 23, 2012. Retrieved June 21, 2019.

[70] Lichtenstein, 5.

idea of equality was rejected by various White societies. Blacks were expected to know and to keep their place.[71]

The Whites involved did not want to see Blacks as equals. It upset the balance of power as constructed during slavery and refashioned in the days after Reconstruction. Whites persuaded themselves that Blacks preferred to live crowded together in infested slums where their children died at much higher rates than even poor White children. It was "easy and convenient for Whites to explain the substandard and unhealthy structures in which Blacks lived as a natural consequence of inherent racial deficiencies."[72] Confined to cramped living spaces and forced to conceal their anger behind a mask of indolent happiness while in the presence of Whites, Black men found ways to vent their frustrations on their families, especially their wives. Many wives who stood up to their husbands were beaten but could also tell their husbands to leave, although many couples did sustain long-lasting marriages,[73] further reinforcing White ideas of the bestiality of Black men.

The practice of paternalism also enhanced White supremacy by promising to lift Whites out of poverty. Sharecropping had become typical for poor Whites as well as Black farmers who no longer could afford to own their land. Families could not "get ahead" or out of debt because of predatory lending practices, the fluctuating prices, and the boll weevil. Then the economic disaster of the Great Depression drove many to tenant farming on what was once their land. If a family could not produce enough to carry them

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[71] Leon F. Litwack, *Trouble in Mind, Black Southerners in the Age of Jim Crow.* New York: Vintage Books, a division of Random House, Inc.1999.

[72] Litwack, 336–337.

[73] Litwack, 350–351.

over the winter, they had to borrow from relatives or rely on credit, further imperiling their futures.[74] The mill villages constructed to house, feed, and supply all other needs of the White workers, which were initially required to attract workers to the job, became more than a business strategy in the New South. Over time, these physical privileges shaped the expectations of White workers and generated more personal relationships between workers and managers, especially when all lived in the same company town. Perks such as schools, churches, community centers, movie theaters, and baseball teams came to be normal parts of life in the camps. The company, therefore, subsidized the lifestyle of its White workers. The APC camps provided some of these extras to its Black workers, but they were still separated into their own enclaves out of sight of the White camps whenever possible. Textile mill villages were far more stringently separated, with only menial, outdoor jobs available to Black men. As Brattain has shown, both Blacks and Whites understood textile mill villages were created for Whites only.[75] (Discrimination carried a gender component as well, as women and children were preferred in the spinning rooms. Their smaller hands fit between moving parts more easily.) Other mill village types did not display these separations in job categories as much as they did in living accommodations. Birmingham steel mill villages were racially separated, but none excluded Black workers, as the work meant long hot hours underground or in the furnaces and rolling mills, the kind of working conditions for which Whites thought Blacks to be better suited. Blacks were still considered by many Whites to be little more than animals with lower intelligence and superior strength.

[74] Brattain, 42.

[75] Brattain, 39.

This was the general tenor of the social structure in the South in the first half of the twentieth century. In rural settings, there was more equality in work and remuneration for both Black and White sharecroppers (All were desperately poor by the advent of the Great Depression.) because one only became a sharecropper when all other options were exhausted. Still, there was a feeling of White pride and self-importance over Blacks even if the economic situations were clearly reversed. Whites were able to find a way to feel a sense of superiority over Blacks because they knew other Whites would support them regardless of the circumstances.

Indeed, "the White south succeeded in eliminating most Blacks as participants in the democratic process" after Reconstruction. Legal disenfranchisement was used to ensure that Blacks would never regain political influence. This was another reason schools were felt to be less necessary for Black children. The ability to read and write was necessary to vote.[76]

APC work crews were initially largely drawn from the locality of the dam construction site. Farmers left their farms to work for the APC because they wanted regular paychecks and expected they could work while they were waiting for their crops to mature; hard work for the APC was not a bad prospect when the alternative was no income at all. Farmers' homes were spread out, and women and children also worked on farms, but in textile mills jobs defined by age and gender, reflecting and reifying notions of social worth, not always in a good way, since women earned 50 to 60 percent less than men for performing the same jobs.[77] Women who worked at the APC sites were probably

[76] Litwack, 228, 229.

[77] Brattain, 40–41.

not highly paid and did not have construction jobs. They worked as stenographers, answered phones, taught school, and at least one managed the mess halls.[78]

The APC work in this era was done by an ethnically mixed set of laborers who came together in a workplace that offered a steady income. Until the 1920s, unions were not very interested in organizing Southern mill workers because of their continuing depiction as "passive and compliant, the products of paternalism, oppressive conditions, bizarre religious beliefs, and a backward, individualistic culture."[79] This depiction might have been partly true, especially in the oppressive heat and humidity, and certainly "southern textile mill workers were among the lowest paid workers in the nation but mill village welfare subsidized what must have seemed to be a relatively prosperous lifestyle for White workers in the rural South."[80] It is normal for people to want to better themselves. For Whites living together in isolation from others in the camps, as in the mill villages, there grew a strong sense of community almost like having blood relatives nearby. In Georgia and Alabama, most farmers did not have telephones, electric lights, or even running water, and certainly not large groups of other families living nearby, but those living in many mill villages and the White APC camps could boast of all those, and indoor plumbing, iceboxes, movie theaters, swimming pools, laundry services, and sports teams that would not have been possible for farmers who worked at hard physical labor from sunup to sundown. It was not so for Black workers. These "intangible sorts of

[78] Mrs. Mitchell was put to work after her husband died, probably to solve her financial predicament as much as because she was a proficient cook. However, she was renowned for her expertise and apparently gained a high status as a surrogate mom for many of the young men who worked at the camps. She called them "her boys."

[79] Brattain, 44.

[80] Brattain, 46.

compensation" for their work given to Whites were described by W.E.B. DuBois in 1935 as "a sort of public and psychological wage" reaped by all Whites in the South merely by the color of their skin. "They were given public deference and titles of courtesy because they were White. They were admitted freely with all classes of White people to public functions, public parks, and the best schools…Their vote elected public officials, and while this had a small effect upon the economic situation, it had a great effect upon their personal treatment and the deference shown them," wrote DuBois, "while the Negro was subject to public insult."[81] This was not rhetoric; it was the truth.

Jobs were therefore identified in terms of race: janitors were Black; textile workers were White. Whiteness prevented Whites from seeing they might have a common interest with Black workers, but the role race played in the industrialization of the South meant Whites and Blacks could not have the same interests. Brittain explains that Whiteness "determined the ability to *become* working class in the New South…Moreover, the benefits White workers derived from discriminatory hiring policy – wages, jobs, and welfare – encouraged them to define their interests as racial ones and gave them a material investment in the maintenance of White supremacy…Whiteness may have been the conceit that allowed business leaders and industrial development boosters to claim, and workers to believe, that what the working-class really needed were lower wages for Black workers and more White jobs, rather than better jobs."[82] It also meant that any material benefits that did accrue were for Whites only. The Southern poor

[81] Brattain, 46. Also see W. E. B. DuBois, *Black Reconstruction in America: An Essay Toward a History of the Part Which Black Folk Played in the Attempt to Reconstruct Democracy in America, 1860–1880*, New York: Harcourt, Brace and Company, 1935, 700.

[82] Brattain, 47.

were socially divided into "classes of White and Black, "inside" and "outside" workers, machine tenders and janitors." By the 1930s, this divide had created a new category of racial identity, one that "blurred the lines of class between Whites and intensified distinctions between White and Black workers." [83] At every step of the way, Blacks lost out to Whites, and the trend built on itself.

The succeeding discussion of housing, social engineering, and social reform is centered largely on White workers because of a dearth of information related to Black workers. The problem with racial issues is longstanding. Black studies in universities were introduced after the Civil Rights Movement. Noliwe M. Rooks published her take on Black studies in *The Chronicle of Higher Education*:

> Throughout our history, for every instance of multiracial cooperation and democratic resolve to at least address, if not eradicate, the scourge of racial inequity, we have witnessed moments an images, like those in the aftermath of Hurricane Katrina, where we as a nation are once again forced to look upon the pain, shame, rage, and despair that underlie racial inequality in the United States. What is frustrating is the sneaking suspicion that we are not getting any better at having a mature conversation about race than we were when Lincoln issued the Emancipation Proclamation.[84]
>
> Unfortunately, thus far we have not made as much progress as we should.

Most of the primary sources for the research are archival; texts include construction reports, meeting minutes, correspondence, and the company publications of several types. These are not continuous, unfortunately. The gaps are only partially filled by visual records, including engineering and architectural drawings, maps, and

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[83] Brattain, 48.

[84] Rooks, Noliwe M. The Beginnings of Black Studies. The Chronicle of Higher Education, Feb 10, 2006, Vol. 52, Issue 23 Noliwe M. Rooks is associate director of the program in African American studies at Princeton University. (http://chronicle.com) http://eds.a.ebscohost.com/eds/detail/detail?vid=9&sid=35274175-4193-4e25-9e29-0a5100b9c442%40sdc-v-essmgr03&bdata=JkF1dGhUeXBlPWlwLHNoaWImc2l0ZT1lZHMtbGl2ZSZzY29wZT1zaXRl#AN=edsgcl.147063210&db=edsggo

photographs that observe and document the progress of the work. *Powergrams* plays a starring role in helping to situate the architecture within the milieu of lived experience in the camps. The choice of secondary sources represents an effort to balance what is clearly the company perspective found in its own archives.

We are presently one hundred years removed from most of the camps studied for this dissertation. Most of the research has consisted of reading through the documents stored at the archives of the APC in their main offices in Birmingham, Alabama. The construction report narratives and the drawings, along with official photographs and copies of the company magazine, have proven to be the most helpful sources of information. One man, who grew up in the Gorgas camp,[85] wrote his memoirs of life in the camp, which was invaluable in understanding the changes over time within the camp and after the construction company was long gone. Two writers have written extensively about APC history, but they did not consider the camps in any detail though they do paint a very clear picture of the men who began the company and the men and women who run it today.[86] My contribution has been to consider the constructed working environment in which the workmen were able to build such an important resource for the state of Alabama.

2.3 Tools for Community Building: The Case of the *Powergrams* as Primary Source

[85] Royce Dean Northcutt, *I Remember Gorgas,* self-published, 2000. Northcutt wrote of his experiences as a child and young adult at Gorgas.

[86] Harvey H. Jackson, III, *Rivers of History, Life on the Coosa, Tallapoosa, Cahaba and Alabama*, Tuscaloosa, AL: The University of Alabama Press, 1995, and *Putting "Loafing Streams" to Work, the building of Lay, Mitchell, Martin, and Jordan Dams, 1910 – 1929*, and Leah Rawls Atkins, *Developed for the Service of Alabama – The Centennial History of the Alabama Power Company, 1906 – 2006*, Birmingham, AL: Alabama Power Company, 2006. Both authors have written extensively about the APC and are frequently referenced in this dissertation.

The *Powergrams* newspaper played a large role in the community-building efforts of the APC. At the home office in downtown Birmingham, Alabama, the APC management sought to alleviate the isolation (and direct the allegiances) of these families. A company newspaper was distributed to all the camps and offices of the APC on a monthly basis. Anyone could subscribe for $2 per year. Part newspaper and part gossip sheet, the cleverly designed and carefully crafted publication served to engender a spirit of kinship among all employees. The APC presented itself as so concerned with the quality of life in its camps that the men would move their families with them to the next construction site where they knew they would find friends.

> According to the Editorial Page of the first edition, the magazine was written edited and prepared, not by a staff hired for that purpose, but by employees of the company, who devote hours of overtime work to the project. Let us all try to distribute the burden. This is your paper, and we will welcome criticism, commendations, suggestions, cartoons, news items, photographs, subjects for editorials, questions and discussion.[87]

Sometimes the editors wanted to reach out and talk or make announcements. Maybe they needed to fill a page, or maybe they saw it as "we think about such things today," as teambuilding. Poetry written by employees and announcements of contests for schoolchildren were published often if not regularly. Comments on the weather and the willingness of APC employees to go out in a storm to repair a downed power line would make anyone proud to work for a company that hired heroes, or poets, or extra-bright high school students who might win a $15,000 model home built on their parent's lot.[88] (To put this prize into context, most of the APC homes were built for under $5,000 each.)

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[87] "Editorials," *Powergrams,* April, 1920, 8.

[88] "Some Interesting Developments in the International Home Lighting Contest," *Powergrams,* September, 1924, 29. The contest was an International Home Lighting Contest for schoolchildren held in

The news from each camp was faithfully published every month along with wedding and birth announcements, jokes, and gossip. Announcements of the planning of new dam projects and their progress toward construction phases were avidly followed by men wanting to know when they might find employment with the APC in the future. Heroes were often celebrated. In March of 1925, two employees were credited with saving a man's life when he contacted a 44,000-volt transmission line because the men were well trained.[89] But the *Powergrams* was not just a vehicle to unite the workforce. It also promoted the sales of electrical appliances and company stock to its employees. APC promoted employee investment in personal shares of the APC preferred stock, which employees bought conveniently with a payroll deduction plan.[90]

The APC had envisioned a better future for the residents of the state; they were in business to make money. How better to reach both goals than to offer the camps as models for the consumer? When working class people living in a rural setting could be shown to have the latest in electric stoves, lights, and heating, a powerful message was sent to the rest of the state's population: buy electric appliances. The APC sold appliances, offering to add the monthly payments to the electric bill so that customers could be the first in their neighborhood to have their new stoves/lights/heat installed.[91] A

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the US and Canada advertised "in Saturday Evening Post, Literary Digest, and scores of other 'big circulations magazines.'" The Lighting Educational Committee in New York City sponsored the contest.

[89] *Powergrams*, March, 1925, 8. W.J. Baldwin was Editor-in-Chief of a whole stable of writers, but the editorials do not carry bylines, so it is impossible to know who the author was.

[90] "Reasons Why Alabama Power Company Stock Sells So Well" *Powergrams,* August 1920, and "Preferred Stock Sales Campaign" *Powergrams,* December 1920, back cover.

[91] "Electric Range Announcement, how to cook at less cost, less drudgery and in less time!" Powergrams, August, 1925, back cover. A sale was advertised in which for six weeks, prices for a range could be purchased for $130, completely installed, with an initial payment of $10 and the balance extended equally over fifteen months.

big push for sales of all things electrical was made every fall in *Powergrams* just in time for family get-togethers at Thanksgiving and Christmas gift-giving**.**

Whether the student is more interested in social, economic, technological, or cultural history, each informs and is informed by the creation of architecture. This dissertation has elements of all these topics, but the institutional history of a large utility company is the most consistent subject in these pages, albeit based upon a company-centric, constructed point of view. How was this company able to visualize important infrastructural improvements in a backward southern state? It took special circumstances to move the construction projects forward when the potential for future success was not in evidence and even more pluck and determination as the United States fell into the Great Depression. Are there important truths embedded in the architectural record? The evidence points to a positive response to this question.

2.4 Planned Communities, company towns, and typologies of construction

Most company towns and worker camps drew from ideas about innovations in planning in an age of industrial production where social engineering through housing was practiced by the developers/owners of those towns. General trends in housing culture and the financing of the cost of constructing worker housing impacted the quality and stylistic choices of the investors. Oliver J. Dinius and Angela Vergara documented in *Company Towns in the Americas, Landscape, Power, and Working-Class Communities* that many company towns all over the Americas demonstrate the common predilection of owners and managers of company towns to attempt social engineering through the management and design of the built environment.[92] Among these owners' goals was the isolation of some workers to limit their access to corrupting influences, the creation of a stable and productive labor force, and the limitation of labor unions. Certainly, these goals were also held by the APC.

Hardy Green, a former editor and contributor to magazines such as *Fortune* and *BusinessWeek*, wrote on US company towns. His stated reason for writing was that he realized there was no general history of the American company town. For Green, company towns embody the place where one business entity exerts a Big Brother-like grip on the worker population, controlling or even taking the place of government, collecting rents on company-owned housing, possibly dictating buying habits at the company store, and religious and leisure activities by limiting the possibilities for choice.

[92] Oliver J. Dinius and Angela Vergarra, eds., *Company Towns in the Americas, Landscape, Power, and Working-Class Communities* (Athens, GA: The University of Georgia Press, 2011). This book contains case studies of eight industrial company towns focusing on social and spatial engineering resulting in the control of workers' social and political activities.

He describes company towns as either heavens or hells for the employees.[93] This vision of control over employees certainly describes conditions at the rural and far-flung dam sites in Alabama. But was life so bad for the APC workers by their standards in their times?

Green finds that at one point more than 2,500 single-enterprise towns dotted the United States. For Green, these company towns can be divided into two types: first, the ideal community model where companies promise to share the bounty with the workers if only in the form of modern public buildings, libraries and facilities for leisure, education and cultural enrichment, and of course, comfortable dwellings for the workers and management. A paternalistic attitude may be present as well and usually manifests as rules for keeping up standards of tidiness for the home and yard, alcohol consumption, and religious practice.[94] The second type is a for-profit operation that exploits its workers to show a profit no matter that it is at the expense of employees' well-being. This type is typified by the Appalachian coal mining communities immortalized by country singers and filmmakers. The ruthlessness of the owners of these places, as Green finds, seems "a willful expression of malicious personalities."[95] Perhaps Green is too simplistic, but the APC camps will be shown to be more closely aligned with the first type although they were never as perfect as his paradigm would suggest.

2.5 A National Housing Culture

[93] Hardy Green, *The Company Town; The Industrial Edens and Satanic Mills that Shaped the American Economy*. Philadelphia: Basic Books, 2010.

[94] Green.

[95] Green.

According to Alexis de Tocqueville's study of American society in 1830,[5] the American family home was one of the most powerful stabilizing forces in our democratic society. This popular theme has been taken up more recently by writers like Gwendolyn Wright, Thomas C. Hubka, and Judith T. Kenny, who have studied American family homes of the early to mid-twentieth century from a better-informed point of view (i.e., hindsight). In addition to the work of these authors, this dissertation seeks to explore the worker villages of the APC as, among other things, an example of working-class housing and middle-class housing in the company towns that the APC built during the first half of the twentieth century.

The period from 1900–1930 (the Progressive Era) was particularly significant for the emergence of a national housing culture although middle-class housing standards were not reached by a majority of families until after World War II. Many authors who have written on housing in the 1920s and 1930s have ignored working-class and popular vernacular housing. Instead, they have concentrated on either end of the social spectrum; the literature seems to leap back and forth between the very wealthy and those living in slums. Scholarship and public policy have unfortunately been derived from these extremes and have resulted in some misinterpretation of working-class housing. Hubka and Kenny feel it is necessary to "more carefully assess . . . in this critical period of transformation to account for the full range of socio-economic conditions that influenced the entire inventory of American housing."[96]

[96] Thomas C. Hubka and Judith T. Kenny, "Examining the American Dream: Housing Standards and the Emergence of a National Housing Culture, 1900–1930" *Perspectives in Vernacular Architecture*, Vol 13, No. 1 (2006), 49–69.

Hubka and Kenny used a comparison of floor plans of working-class housing to represent advances in working income and leisure time (i.e., the addition of a porch), need for more space (personal bedrooms), acquisition of goods (inferred by a rise in the number of closets), and advances in technology (kitchen and utility upgrades). The inclusion of new spaces meant more privacy and therefore status for occupants. The advance of decent, comfortable living spaces for groups, which did not previously have access, has been explained by them to be the product of technological progress and the initiative of the working-class themselves in the attainment of modest but substantial homes with separate dining rooms, living rooms, three-fixture indoor bathrooms, public utilities and services, private bedrooms, and so on, as well as a car and garage.[97]

In the first half of the twentieth century, industrial managers and industrial town planners could direct the arrangement of roads, facilities, and people based on modern theories of urban organization. Heads of large corporations, owners of mining camps, and manufacturers sought expert advice from these planners when they recognized their value in ensuring that employees adhered to employers' regulations governing cleanliness, living habits, boarders, and other domestic matters of concern to the employer. (Sometimes social secretaries or "welfare secretaries" were employed to visit workers homes to observe how families actually lived.) American industrialists felt it was a good business investment to provide model towns for their workers. Every feature was expected to have some constructive influence benefitting the workman at no cost to the worker. This was done to forestall progressive reform movements and strikes.[98] Planners

[97] Hubka.

[98] Gwendolyn Wright, *Building the Dream: A Social History of Housing in America* (Cambridge: MIT Press, 1980), Chapter 10 "Welfare Capitalism and the Company Town," 177–192.

had unprecedented authority and were seen by the industry owners as experts on scientific management and increased production through the improvement of worker's physical well-being and constructive influences that better prepared the workman for his work.

In the early nineteenth and into the twentieth century, plans and ideas for house building were published by builders and architects for use by the general public, the majority of whom did not employ an architect to design their homes. Plan books were a popular way of communicating the wishes of the homeowners to their builders without having to pay an architect to draw up plans. One of the first to publish was Asher Benjamin, born in Connecticut and building houses in that state, Vermont, and Boston. Benjamin published *The American Builder's Companion* in 1806, one of seven handbooks and builder's guides that were designed to be educational for the builders and architects of the New England region.[99] Perhaps more relevant to this dissertation was Andrew Jackson Downing's *Cottage Residences* (published in collaboration with Alexander Jackson Davis, a prominent residential architect), in which the landscape designer and magazine publisher began a legacy of home designs to fit into the landscape naturally and promote good citizenship and health. Downing's books were geared toward the instruction of the homeowner as well as the builder. He became a tastemaker, helping the public choose not only house designs but also paint colors, landscape plantings, and

[99] Asher Benjamin, *The American Builder's Companion* (New York: Dover Publications, Inc., 1969). This is a reprint of the sixth edition of 1827 and contains 70 plates showing Benjamin's elegant line drawings and engravings of details that could be combined to produce exactly the house of which the homeowner dreamed.

styles of their furniture.[100] However, Downing was best known for his romantic cottage designs (*Cottage Residences*, 1842 and *The Architecture of Country Houses*, 1850). Downing's was the most prescient work of all the authors listed here because of his treatment of the home as one great assemblage of the correct ingredients for living in harmony with nature. For this reason, he recommended houses be placed in natural settings and painted a light color (but never stark white), the better to blend with the native species of plants, which would give the home resonance with the spirit of the time and people. The APC houses were placed in natural settings because it would have been more expensive otherwise, and the light colors were thought to protect against insects.

Minard Lafever, who detailed Greek-inspired proportions (*The Modern Builder's Guide*, 1833); and William T. Comstock, who publicized Victorian patterns (*Turn-of-the-Century House Designs*, published in 1893 as *Suburban and Country Homes*)[101] were other popular writers. Specialty magazines and publications offered more suggestions. By the 1920s, companies such as Sears, Roebuck, and Co. marketed home designs directly to the consumer. Sears would sell an entire house in a kit to be assembled on a prepared building site. However, those not near a railhead incurred huge freight expenses for delivery, so most Sears' houses were built near the tracks. Similarly, Aladdin Homes published catalogs and advertised kits almost magically "shipped in a day" from their

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[100] J. Stewart Johnson, in the introduction to A. J. Downing, *The Architecture of Country Houses* (New York: Dover Publications, Inc. 1969), xiii.

[101] Andrew Jackson Downing, *Cottage Residences* (New York: Dover Publications, Inc., 1969), originally

published 1842 and Minard Lefever, *The Modern Builder's Guide* (New York: Paine and Burgess, 1833); and William T. Comstock, *Turn-of-the-Century House Designs* (New York; Dover Publications, Inc., 1994), originally published in 1893 as *Suburban and Country Homes*. These books are in the author's library as reproductions by Dover Publications, Inc. and an online version of Lefever downloaded from North Carolina State University Libraries on April 20, 2015.

manufacturing plants in Florida, Michigan, Louisiana, and Oregon in the United States and from Toronto and Vancouver in Canada.[102]

Magazines such as the *The Craftsman,* edited and published by the furniture designer Gustav Stickley from October 1901 to December 1916, and *The Ladies Home Journal*, published by the Curtis Publishing Company beginning in 1883 and reaching over a million subscribers by 1903,[103] advised homeowners on the latest trends and fads and promoted household items ranging from Stickley's furniture designs to furniture polish. These publications also promoted moral and health improvement through good design. These magazines are mentioned only briefly here, but they were important publications, influential to vernacular expressions such as those at the APC camps.

The idea of improvement of America's morals and health through architecture was not new. Alexis de Tocqueville's study of American society in 1830 touched on these themes.[104] Later, company towns constructed during the early twentieth century were planned by architects and engineers to assist residents in their daily lives, partly to exercise a degree of control over the local society. This sounds Machiavellian, but the owners also hoped to insulate workers from class and political conflicts, increase productivity, and achieve social harmony. Even though social ideology often shaped the town's design and internal organization, the company's administrative practice always

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[102] "Aladdin homes built in a day" catalog no. 30 (Bay City, MI: Aladdin Company, 1918), online version downloaded from North Carolina State University Libraries on April 20, 2015.

[103] These dates of publication were fact-checked online at Wikipedia on April 17, 2015. Gwendolyn Wright

has the publisher of the Ladies Home Journal as Edward Bok, who took over from Louisa Knapp Curtis, his mother-in-law, in 1889. However, Mrs. Curtis was the original writer and her husband the original publisher.

[104] Clifford Edward Clark, Jr., *The American Family Home, 1800–1960* (Chapel Hill: The University of North Carolina Press, 1986).

had to make concessions to the town's unique physical, political, and cultural environment.[105] Ideas about the happiness derived from a job well-done in America date back at least to William Morris, who believed that a happy worker would produce fine work.[106] Many developers chose themes for the creation of harmony and community spirit, mostly period revival styles, but low-cost suburbs might be quite monotonous or highly diversified.[107] The company town could be formulaic or Edenic. Many former residents of APC camps remember their lives there with great fondness,[108] especially the children who enjoyed more freedom than their city counterparts. Although the APC did employ architects and city planners to design parts of some of the later camps, much of the early design work was done in the engineering offices of the APC. The early APC designers, who were not trained as architects, nevertheless were aware of the prevalent stylistic trends and sought to give each camp a sense of its own unique identity, accomplishing the task of branding each camp as a homogenous whole using the same basic plan drawings for multiple camps. Camp dwellers, therefore, developed a sense of camaraderie and membership in a community of like-minded families at a time when many families were being relegated to sharecropping or bankruptcy as the local and

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[105] Oliver J. Dinius and Angela Vergara, editors. *Company Towns in the Americas, Landscape, Power and Working-Class Communities (*Athens, GA: The University of Georgia Press, 2011), 1.

[106] Chris Miele, *William Morris on Architecture* (Sheffield, England: Sheffield Academic Press, 1996), 2–3.

[107] Gwendolyn Wright. *Building the Dream,* Chapter 11, "Planned Residential Communities." Some developers even planned divided highways, traffic circles, and winding scenic boulevards, abandoning gridded city plans and providing more pleasure for driving after the automobile became more commonly used.

[108] Royce Dean Northcutt, *I Remember Gorgas* (self-published c. 2000. No date given), 125–144. Northcutt details the free-ranging activities of boys living at Gorgas between 1927 and 1943, a place too remote to have access to activities other than those they invented themselves. Children in those days had less supervision than they do today, and there was very little danger except drowning or falling and breaking bones. This writer has spoken to several others who lived in APC dam villages, and, certainly, their lives were remembered as being carefree and comfortable enough.

national economies slowed before the Stock Market Crash of 1929.[109] The US South and Midwest were especially hard hit with their agricultural economies. In Alabama, the cotton farmers were beset with the arrival of the boll weevil and the surpluses following World War I.[110]

Not long after taking office in 1933, President Franklin D. Roosevelt implemented a long list of stimulus programs under the umbrella of his New Deal. Among these were the Civilian Conservation Corps (CCC, April5, 1933), the Tennessee Valley Authority Act (TVA, May 18, 1933), and the Rural Electrification Program (REA, May 20, 1935). The CCC was intended to enable young men to provide for their families (without damaging their pride) while raising the standards of living for the rural poor.[111] Camps were segregated and Black men were often discouraged from joining the CCC.[112]

To help bring the millions of unemployed people and their families out of the Depression, President Roosevelt conceived of the CCC. As a two-pronged effort signed

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[109] Alabama farmers ensnared in this system grew from 45.8 percent in 1880 to 64.7 percent in 1930, and in that year, White sharecroppers outnumbered Blacks 37,562 to 27,572, according to J. Wayne Flynt, *in Poor but Proud: Alabama's Poor Whites*. Tuscaloosa: The University of Alabama Press, 1989. 60–61. Read on Google Books, https://books.google.com/books?id=61hiCwAAQBAJ&pg=PA60&lpg=PA60&dq=share-cropping+system+grew+from+45.8+percent+in+1880+to+64.7+percent+in+1930&source=bl&ots=omcO5gMwgA&sig=ACfU3U2_hml4M4Ix_k3QygDIuCBrp-SLBA&hl=en&sa=X&ved=2ahUKEwiT0Y3OhoLsAhVDnq0KHXcDD5gQ6AEwEHoECAEQAQ#v=onepage&q=share-cropping%20system%20grew%20from%2045.8%20percent%20in%201880%20to%2064.7%20percent%20in%201930&f=false (accessed September 24, 2020.)

[110] Downs, Matthew. Encyclopedia of Alabama http://encyclopediaofalabama.org/article/h-3608#:~:text=Although%20the%20US%20stock%20market,to%20cities%20and%20industries%20thereafter. Accessed 9/24/2020.

[111] Kimberly Amadeo, reviewed by Michael J. Boyle, "New Deal Summary, Programs, Policies, and Its Success: Four Surprising Ways the New Deal Affects You Today" in The Balance, July 31, 2020. https://www.thebalance.com/fdr-and-the-new-deal-programs-timeline-did-it-work-3305598 accessed September 24, 2020.

[112] Ren Davis, "Civilian Conservation Corps" in New Georgia Encyclopedia https://www.georgiaencyclopedia.org/articles/history-archaeology/civilian-conservation-corps. Several Southern states did not recruit Black workers although racial discrimination was prohibited.

into law, it would put young men between the ages of seventeen and twenty-three back to work, and it would help to alleviate what Roosevelt saw as the unrestrained development and destruction of the nation's forests. The US Army would administer the camps, providing the recruiting, food and housing, transportation to and from the camps, and would construct the camps using this new labor pool of single unemployed men. Recruits signed up for a six-month stint, but with good behavior and work habits, could reapply for up to two years total employment in the CCC. The men were paid $30 per month, with $25 of that going back to their families. Although there were complaints from labor unions, this was far more than Army recruits were paid. Discipline was strict with an early-to-rise and early-to-bed schedule that left only evenings for recreation or classes, but there was to be no saluting or weapons training.[113] As most of these young men did not complete grade school, the CCC made education a high priority.[114]

The recruits were housed in ranks of long barracks, usually of only one story.[115] Men lived in tents until their camp until the barracks were completed. Camps consisted of barracks, mess halls, recreational halls, bathhouses, latrines, a headquarters building, and various supply storage areas. In addition, classrooms, a canteen, post office, barbershop, and hospital would round out the camp. Sometimes there was a theater. These were rustic

[113] John T. Menard. 2016. "Roosevelt's Grand Experiment." *Columbia: The Magazine of Northwest History* 30 (3): 13–20. https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=31h&AN=118651573&site=eds-live&scope=site.

[114] Menard, 18.

[115] Menard. The original name of the organization was the Emergency Conservation Work Corps, and in addition to the work performed the men were provided educational opportunities in the form of vocational training and recreational activities. 14.

frame structures heated with wood or coal-burning cast iron stoves.[116] In the beginning, the army didn't have an official plan for the layout of camps, so the camp at Jacksonboro, South Carolina was designed in a horseshoe shape to allow for the beautification of the camp, but later Army regulations called for gridded streets and single-story barracks.[117] Most of the work consisted of forestry or the construction of bridges, roads and trails, and public recreational facilities although some built dams or put out forest fires. An unofficial CCC publication, *Happy Days*, was sent out weekly to entertain and inform CCC personnel about changes in regulations and events at local camps.[118] Roosevelt's bold experiment with the CCC was both highly regarded and controversial. Although the men received the benefits of exercise, education, and income, they were guinea pigs for social experimentation designed to mold them into "ideal American citizens" through the Federal Theatre Project and the imitation of a military environment, which was expected to prepare the men for jobs in an industrial future.[119]

The related Works Progress Administration (WPA) employed men and women for local projects, but it did not supply camp facilities for its employees. Most of the work

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[116] National Park Service, "Civilian Conservation Corps," https://www.nps.gov/thro/learn/historyculture/civilian-conservation-corps.htm accessed September 24, 2020.

[117] Robert A. Waller. 2001. "Happy Days and the Civilian Conservation Corps in South Carolina, 1933–1942." *The Historian* 64 (1): 39. https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=edsjsr&AN=edsjsr.24450671&site=eds-live&scope=site.

[118] Waller, 41. The title was a reference to President Roosevelt's campaign song, "Happy Days are Here Again."

[119] James Wilson. "Community, Civility, and Citizenship: Theatre and Indoctrination in the Civilian Conservation Corps of the 1930s." Theatre History Studies 23 (June 2003) 77 and 81. Accessed at https://eds.b.ebscohost.com/eds/results?vid=0&sid=6db727e6-aed7-4324-b3d4-8e069bc4ac63%40pdc-v-sessmgr06&bquery=Community%252c%2BCivility%252c%2Band%2BCitizenship%253a%2BTheatre%2Band%2BIndoctrination&bdata=JkF1dGhUeXBlPWlwLHNoaWImY2xpMD1GVDEmY2x2MD1ZJnR5cGU9MCZzZWFyY2hNb2RlPUFuZCZzaXRlPWVkcy1saXZlJnNjb3BlPXNpdGU%3d September 24, 2020.

for the WPA consisted of highway, road, or street construction, but public utility work and the construction of public buildings, parks, recreational facilities, some airport projects, and public service projects. One such public service project paid its workers to measure and photograph historic sites and architectural treasures around the country (HABS/HAER), but most were welfare activities providing work for unskilled women. People with professional experience would be assigned to music, art, writing, or theater projects.[120]

The CCC camps had many physical and social similarities to the APC camps, but by 1933 most of the APC camps were well established or even becoming obsolete. Camp Mitchell was already evolving into a weekend retreat for the employees of the APC and their families. Camping trends emerging before the turn of the century had become a national pastime by the 1930s. Roughing it in the fresh air was felt to build character. The rise of boy's and girl's camps in the early 1900s, the rapid growth of Boy Scouts and Girl Scouts, the YMCA, and the establishment of the US Forestry Service and the National Park Service were also drivers of this growth. The organization of the APC and CCC camps may also have related to the doubts about city living and "industrial capitalism" that brought "an artificial mechanized world" to city life,[121] but not all workers were interested in camping or a rustic esthetic. Housing workers was an important part of the growing industrialization of America.

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[120] Congressional Research Service, "Job Creation Programs of the Great Depression: The WPA and the CCC," EveryCRSReport.com, January 14, 2010, accessed online at https://www.everycrsreport.com/reports/R41017.html, September, 24, 2020.

[121] Michael B. Smith. "'The Ego Ideal of the Good Camper' and the Nature of Summer Camp." *Environmental History* 11, no. 1 (2006): 70–101. 73. Accessed September 24, 2020. http://www.jstor.org/stable/3985739.

In 1920, the average model industrial town provided company-built housing for only a third of the workers. The proportion was somewhat higher in the Southern textile villages and mining camps because of their more remote locations from the city. Most company towns were homogeneous along the streetscape. Some employers required the residents to use the same materials and paint colors for their facades. This uniformity was symbolic of the modern industrial order balanced between comfort for the residents and control for the employer. Control over the workers and the visible expression of efficiency were the two principal goals of company housing in industrial towns.[122]

The APC camps followed this rule in the beginning, but by the time the camps were turned over to the permanent residents, many changes had taken place, and the camps were no longer so homogeneous. It is questionable whether a "streetscape" would accurately be used in the APC camp settings as the roads followed the topography, winding around the most hospitable building sites and offering fewer sightlines than a town streetscape.

2.6 Social Engineering

Dating back to the first days of the Industrial Revolution, the idea of improving morals and health while maintaining a profit can be found in Robert Owen's social utopia, the New Lanark Mill in Scotland. New Lanark became a successful business and an epitome of utopian socialism as well as an early example of a planned settlement and thus an important milestone in the historical development of urban planning. The New Lanark Mill housed the workers and their families, including 500 children, in tenement

[122] Wright, Gwendolyn. *Building the Dream: A Social History of Housing in America*. Cambridge: MIT Press, 1980. Chapter 10 "Welfare Capitalism and the Company Town"

blocks, resembling a three-story apartment building. Managers lived in the mill village (So did Owen for the first few years.), and a company store was provided where villagers could buy necessities at near wholesale prices.[123] Communal arrangements for cooking, dining, and leisure activities were extended to residents, and profits were plowed back into the business. Owen felt that characters were formed by circumstances, that truth would ultimately prevail over error because vice was only ignorance, and that knowledge equated to happiness.[124] Owen opened the first daycare center for the children of working mothers in Scotland a year after he opened a school to educate adult learners. Not only did this nursery school free the mothers to work in the mills, New Lanark became a model for other worker villages because it was proof of the ability to attain a clean, comparatively healthy industrial environment. It was profitable partly because the workforce was happy with the housing and other amenities. Owen went on to invest in other utopian ventures, notably in New Harmony, Indiana but unsuccessfully so.[125]

The City Beautiful Movement that began in the United States was partially a response to the crowding of cities following the population movement into manufacturing centers, especially in the Midwest. It was also partially a response to Morris and Ruskin's recommendations of escape to the countryside and the social utopias of the Quakers and Owenists. It was mostly concerned with the beautification of cities, which was expected

[123] Jim Hargan, "Utopian New Lanark," British Heritage Magazine (July 2010), 50–53. https://harganonline.com.

[124] Ian Donnachie, "Towards a New Moral World," *History Today,* February, 2012, 42–48.

[125] David J. Mclaren, "Robert Owen, William Maclure and New Harmony," *History of Education*, 1996, 223–233. Owen in 1824 began a new utopian community at New Harmony, Indiana, an existing village in a country where there was more freedom than in eighteenth-century Scotland. Owen planned to reform society through education, but this project ultimately failed because of squabbles amongst the community over land and money and disagreements over the aims and purposes of education between Owen and his investors especially Maclure.

to result in a harmonious social order and increased quality of life but also was concerned with utility, functionalism, and comprehensiveness. If its opponents generally saw the City Beautiful Movement in terms of economics, advocates believed it was "a social organism for living and working in which the union of efficiency and beauty would promote a new civic spirit."[126]

In a slightly different take on the production of a harmonious city, Ebenezer Howard introduced in 1898 the Garden City Movement, which promoted self-sufficient cities of a moderate size surrounded bull's-eye fashion by greenbelts and parks, which would incorporate residential, industrial, and agricultural areas within the city. Howard's expectation was that with an alternative to the sprawling, crowded, unhealthy industrial cities, people could choose to work on farms or factories but live in proximity to both nature and a city center. Residents would have partial ownership in the worker's cooperative, including all the land. Howard's first garden city was built with some modifications at Letchworth in Hertfordshire, England, but it took ten years to really work the way he intended. The Garden City Movement generated a broad range of typologies during the twentieth century. It was an attempt to marry the town and the countryside by the act of gardening. Thus, residential gardens were a very important component of the typology.[127]

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[126] William H. Wilson, *The City Beautiful Movement* (Baltimore: Johns Hopkins University Press, 1989), reviewed by John D. Fairfield, Xavier University Chicago in *Journal of American History*, December, 1990, 1059–1060.

[127] Graham Livesey, "Assemblage theory, gardens and the legacy of the early Garden City movement," *Architectural Research Quarterly*, 2011, 271–278. doi:10.1017/S1359135511000819. See also Robert Beevers, *The Garden City Utopia: A Critical Biography of Ebenezer Howard* (New York: St. Martin's Press, 1988), and Stanley Buder, *Visionaries and Planners: The Garden City Movement and the Modern Community* (New York: Oxford UP, 1990). Reviewed by Robert Latham, *Utopian Studies*, 1991, 164.

A similar result was obtained at the APC camps through the coincidence of necessity for fresh foods and the difficulty of transporting anything to and from the camps. The APC experimented with the production of some vegetables and meats, but the primary focus in the camps was raising vegetables in a family's own generously sized garden or yard. Most families raised chickens in Alabama. Chickens eat bugs like termites, so they were allowed to roam the yards freely during the day, including under the houses, another reason houses were raised on exposed pilings.

The garden city was conceived to produce a relatively economically independent city with short commute times that could protect the countryside. Sometimes the garden city idea was modified to be a suburban development that could also supply workers to nearby cities, but these were really in direct opposition to Howard's plans. The APC construction camps had to be as self-sufficient as possible because of their distance from other settlements and lack of roads connecting them with larger town centers. Some of the camps exhibited aspects of Howard's vision, particularly in the proximity of worker housing to the workplace; however, at the camps, this was a more practical relationship than it was social engineering, and the Garden City Movement did not become widespread in the United States until the 1930s after the studied power company camps were already well established.

Many variants on the themes of Garden City and City Beautiful were explored, written about, and discussed in the news media and in social circles to which American company owners and top management belonged. As we do today, interest groups formed to discuss the latest trends in their respective businesses, often vacating to a popular retreat in the mountains or by the shore. Papers published in the trade magazines and

company memoirs contained the writer's opinions on how best to serve their workers to reap the most benefit and profit for the company.[128] Big names like Henry Ford inspired industrialists all over the world who believed, like Ford, in an essential truth: that an investment in the worker's quality of life would result in increased productivity and improved labor relations. The APC clearly believed their attention to improvements for workers at the company camps would pay off in similar ways.

Under the auspices of industrial managers, the industrial town planner could direct the arrangement of roads, facilities, and people based on modern theories of urban organization. Heads of large corporations, owners of mining camps, and manufacturers sought expert advice from these planners when they recognized their value in ensuring that employees adhered to employers' regulations governing cleanliness, living habits, boarders, and other domestic matters of concern to the employer. (Social secretaries or "welfare secretaries" investigated workers' homes to observe how families actually lived, meaning that though workers benefitted from the amenities mentioned above, they were subjected to invasive inspections and surveillance.) American industrialists felt it was a good business investment to provide model towns for their workers. Every feature was expected to have some constructive influence benefitting the workman at no cost to the worker. This was done to forestall progressive reform movements and strikes[129] in

[128] The question of how to best and most efficiently attract and retain competent workers was frequently addressed in the publications of large corporations. The proceeds of one such meeting were published in book form in 1910. Because it contained so much information on employee housing in Alabama's mines and steel and cotton mills, it became a very useful resource for this dissertation. See *Homes for Workmen, A Presentation of Leading Examples of Industrial Community Development*. New Orleans: The Southern Pine Association, 1910. Several papers presented at this conference were about planned company towns built in Alabama.

[129] Ronald R. Kline, *Consumers in the Country: Technology and Social Change in Rural America* (Baltimore: The Johns Hopkins University Press, 2000,) 201–202.

worker villages across America and in the APC camps as well. Prospective investors and politicians would be invited to visit the camps, and ensuring that the camps were spotlessly clean, orderly, and filled with happy families enhanced the prospect of any perceived return on the investment in entertaining dignitaries.

2.7 Social Reform through Housing

Voluntary cooperation between government and private enterprise was enhanced by Better Homes of America, a government office in charge of stimulating the national economy by encouraging home improvement. Better Homes of America grew out of the Better Homes Movement begun by the Butterick Publishing Company,[130] a publisher of magazines for women. The Better Homes Movement was supported by government leaders such as President Warren G. Harding, Vice-President Calvin Coolidge (who served as honorary chairman of the Advisory Council of Better Homes of America) and Secretary of Commerce Herbert Hoover (president of the Board of Directors), along with the building supply industry because it encouraged people to own, remodel, and improve their homes.[131] Better Homes of America sponsored the local competitions and Better

[130] Ebenezer Butterick, a tailor and his wife invented and produced the first "graded" patterns for cutting the correctly sized parts to sew into clothes for men and boys, in 1863. Expanding into women's styles, the Buttericks became the purveyors of high fashion for those on a budget. By 1867 the Buttericks were publishing Ladies Quarterly of Broadway Fashions and then a monthly bulletin called Metropolitan. This increased their volume and publications and pattern sales went international. Butterick is still in business as a supplier of patterns for women's garments for the home seamstress under the aegis of the McCall Pattern Company, who acquired Butterick in 2001. http://butterick.mccall.com/butterick-history-pages- 1007.php last accessed April, 24, 2015.

[131] *Prosperity and Thrift: The Coolidge Era and the Consumer Economy, 1921–1929.* Library of Congress. This collection documents the role of government in the nations' transition to a mass consumer economy during the Coolidge administration. http://memory.loc.gov/ammem/coolhtml/coolhome.html#bhm. The Better Homes Movement was also discussed by Gwendolyn Wright in *Building the Dream.* Chapter 11, "Planned Residential Communities" goes into detail about how the percentage of homeowners had been steadily declining for a decade. President Herbert Hoover was worried about what he considered the foundation of a sound economic and social system.

Homes Week, which highlighted a demonstration house in many cities across the country. In Alabama, there was apparently only one kitchen written up in the Better Homes in America guidebook, but it was given several paragraphs, and a set of "before and after" images appears on pages 16 and 17 of the "How to Organize the 1927 Campaign" issue.[132] In the rural South, committees sponsored home-remodeling campaigns aimed at both Black families and White industrial workers, encouraging whitewashing, painting, and home repairs; this was a centerpiece of the APC's program to foster employee team spirit while lowering the bottom line.[133]

The APC did sponsor home-improvement campaigns, but their real focus was on the neatness of the yards and gardens, the general cleanliness of both interiors and exteriors (which were inspected by APC health inspectors working under the company's head physician, Dr. Benedict.). The inspectors constantly monitored the presence of insects, particularly disease-carrying mosquitoes, which breed prolifically in the often still, warm waters of the American South. The prime objective was that the community presented itself in the most attractive manner at no extra labor cost to the company and provided adequate clean and safe housing for the workers to ensure the men would be on

[132] *Prosperity and Thrift,* "Better Homes in America," publications No. 11 and No. 12, a guidebook for better homes campaigns in rural communities and small towns, web-published by the Library of Congress, shows how the movement sought to communicate its ideas and expand the market for consumer products.

[133] Samuel Benedict, "Clean Up Week Contest," *Powergrams,* August, 1925, 1–3. "For the purpose of stimulating interest in sanitation among the employees of Alabama Power Company and the Dixie Construction Company, and to create and establish in the employes (sic) of the company a desire to beautify and improve their living conditions, the Medical Department put into effect a clean-up campaign and offered prizes for the best-kept house and premises of employees, according to the general outline of sanitation." With these opening words, Dr. Benedict established the position of the company vis-à-vis the workers. He also noted that the employees who lived in the permanent hollow tile houses did not win a single prize, but that all the prizes went to the lower-paid workers living in the temporary houses which were converted to permanent houses.

the job every day without fail. Because the company owned most of the housing stock and all the other structures in each company town, materials for repairs and paint were made available to the residents at low cost or for free to encourage that off-duty hours be spent in beautification.

The word “community” has been used several times in this chapter in connection with other writers. We may understand community in various ways; sometimes it means a group of like-minded individuals, and sometimes it means a neighborhood or even a small town. The concept of “community” is quite slippery because it means different things to different people. In this dissertation, “community” when referring to the APC camps refers to the feeling of brotherhood and inclusion fostered within the APC camps by the company. This kind of community is more than just a group of like-minded individuals because it infers a shared lifestyle, identity, and worldview among its members. It does not mean that all were included, however. For that reason, it will not be used to refer to the camp as a whole.

The APC’s style of business was unique. Their mandate was the betterment of the citizens of Alabama through electrification, which helped bring the state from a largely farm-based economy into a technological revolution. The management style of the APC is indicative of a type of social responsibility different from that of the federal programs at TVA and Hoover Dam because long before dam building became a large federal concern, the APC’s mindset was predicated on the idea that the APC was committed to the improvement of Alabama. The APC was publicly owned and conceived on a much larger scale than other power companies in the region that were owned and operated by individuals, families, or even a small town. Indeed, the APC was conceived as a way to

empower all its investors and to boost the state economy; at the same time, it influenced the type, style, number, and quality of worker housing and, therefore, worker experiences.

2.8 Social Housing

Town planning with workers in mind was not new, of course; Lowell, Massachusetts had been famous since the 1820s. Lowell was a planned community built for the millworkers who poured in from family farms.[134] However, there were major differences between nineteenth- and twentieth-century company towns, particularly in the scale of the undertaking. American management depended on sociological and architectural expertise for developing techniques for controlling their workers. They were worried about uprisings; strikes and violence had become rampant since the late nineteenth century. Government and consumer group demands for inspections, occupational safety regulations, and laws limiting the hours and risks for women and child workers pressed management to implement reforms in the workplace. The shortage of trained workers who could master the increasing complexity of production techniques prompted savvy management to find ways to lure and to keep skilled workers from moving on to greener pastures. Welfare work and housing programs were good ways to accomplish these goals according to Gwendolyn Wright.[135]

For example, George Pullman wanted to keep his skilled mechanics from the "baneful influences" of Chicago with its strong unions and sweeping political activity, so he constructed a model town covering 4,000 acres (cost $8 million) in 1884, including

[134] Not only were these young workers housed and fed, but they were able to send money home because they expected to earn a steady income, which was not possible for farmers, whose seasonal harvests were not always profitable.

[135] Wright, *Building the Dream,* Chapter 4 "Housing Factory Workers," 59.

over 1,400 dwellings in brick row houses of uniform size and a few detached houses for manager's families. Pullman owned all these houses and the church, library, stores, and other buildings in the town, which were all profitably rented, along with1,800 dilapidated tenement apartments for unskilled labor. Ten years later the Pullman workers called a strike when Pullman cut wages but not the exorbitant rents, causing President Grover Cleveland to send federal troops to break the strike. Pullman's desire to make money on every aspect of the town and his stern authority represented an old-fashioned approach to industrial welfare[136] and the worst part of the inherent paternalism to be found in the company town model.

Most industrialists were already skeptical of physical planning that could result in the social order, but there were a few examples of successful planning. The best known is the National Cash Register Company's model town in Dayton, Ohio begun in 1884. These workers did strike, but arbitration was resulted in the promise of company-built housing that could be purchased or rented by about half the workforce. Because this model seemed to work well, by 1910, there was renewed interest in the planned company town as a way to control labor; managers reasoned that workers who lived in company-supplied housing would be less likely to strike and more loyal, decreasing the expense of training new employees. Married men, who were considered more stable, could be attracted with better housing, so the benefits for wives and children were stressed in advertisements.[137]

[136] Wright, *Building the Dream,* Chapter 10 "Welfare Capitalism and the Company Town," 183.

[137] Wright, 184.

However, there were major differences between nineteenth- and twentieth-century company towns, particularly in the scale of the undertaking. American managers were worried about uprisings. Government and consumer group demands for inspections, occupational safety regulations, and laws limiting the hours and risks for women and child workers were pressing management to implement reforms in the workplace.[138] The shortage of trained workers who could master the increasing complexity of production techniques prompted savvy management to find ways to lure and to keep skilled workers from moving on to greener pastures. Welfare work and housing programs were good ways to accomplish these goals.[139]

Workers tended to depend more on the company if the homes were rented, not sold, and this was used as a threatening tool for compliance in the workplace, but some companies set up banks to make the houses more easily available for their employees to own since they felt this would make workers less likely to participate in the unions.[140]

Improving worker's health was also a goal of model town planning, so special attention was paid to sanitation and insect control. Temperance was touted and saloons were outlawed; social clubs were "dry." Kindergarten and company schools were built and staffed, and classes were offered in-home medical care, nursing, and nutrition for the housewives.[141] The APC was concerned with the health of not only its employees but also the surrounding families within the area drained by the rivers it stopped. Malaria was a constant threat and very transmittable. The APC furnished sanitary sewers to the White

[138] Wright, 129.

[139] Wright, 182.

[140] Wright, 185.

[141] Wright, 129–133.

sections of their camps, and all structures in the camps were furnished with screens to keep mosquitoes and flies out. Those living within a mile of the shorelines were tested for malaria and then given protective medicines to keep them from coming down with the disease. The APC implemented strict rules for maintenance of homes and yards, but supplies were typically paid for by the company. Children of employees were seen as future employees, so schools were operated for both Black and White children of employees, and often these schools served local children of parents who did not work for the company.

But not all American employees were treated equally. Non-skilled labor did not receive the same benefits, and welfare work was designed to reinforce the hierarchy and upward mobility of employees. In 1920, the average model industrial town provided company-built housing for only a third of the workers. The proportion was somewhat higher in the Southern textile villages and mining camps because of their more remote locations from the city. Less-skilled workers made do by taking in boarders. This was frowned upon by management since it was still felt that it broke down the "home influence" of the nuclear family, but single men preferred to live with a family because conditions in lodging houses were so poor. Both the families and the boarders looked on the situation as impermanent since the boarder wanted to bring his own family to live with him and the family wanted to improve their finances. Twenty-five to 50 percent of all working-class families had at least one boarder in cities and company towns.[142] Some APC families were able to house boarders, but the houses were small, so this was tolerated as it cost the company less if the man paid rent to the host family than it did to

[142] Wright, 186.

house him in a company bachelor's quarters and promoted friendly relationships among the workers. The APC did not make money off the housing or the mess halls, by design. They wanted only to retain a loyal and productive labor force.

For example, consider Dalton, Georgia. During the period from 1884–1940, the cotton mills in Dalton were founded, opened, and bloomed into a viable and competitive industry, employing thousands of workers over the life of the mills. As the mills expanded, workers were drawn from the surrounding counties, growing the population of Dalton and reflecting the trends of postbellum industrialization in the New South.

Although the majority of southerners continued to base their livelihood on agriculture, many Whites faced starvation as sharecroppers, and the mills were seen by many as an alternative or at least a supplement to their poverty. The city merchants and professionals saw the mills as the key to local and personal prosperity.[143]

Dalton was a small but established farming center as early as the 1840s. Local entrepreneurs established the cotton mills in a bid to cut out the middleman, and it was a successful venture although not without initial struggles to prosper and expand. Their workforce was a distinctive culture of rural farm workers who brought their traditions to the mill village, which was forced to come to terms with the other distinct culture of the company managers and owners, the industrial capitalists. These two groups held strikingly dissimilar world views and very different goals for the work at Crown Mills. The mill village was therefore riddled with tension during the early years, from approximately 1880–1890, but in their dynamic interactions, the two groups created a

[143] Doug Flamming, "The creation of an industrial community: The Crown Cotton Mills of Dalton, Georgia, 1884–1940," (PhD diss. Vanderbilt University, 1987) p*assim.*

new social context in which industrial relations developed and a cohesive mill community emerged in the first two decades of the new century, partly because of the increased wages paid to retain workers in their jobs.[144]

With the Great Depression, the cohesiveness floundered. New policies implemented by the managers undermined the well-being of the mill hands, leading to a successful unionization movement and eventual strike in 1934. The mills closed their doors in 1949, leaving behind a workforce that transitioned into the carpet mills that made Dalton the "carpet capital of the world" that it boasted of being in 1987.[145]

In his dissertation on Dalton cotton mills, Doug Flamming found :

> The persistence of rural traditions amid an industrial environment, the reluctance of first-generation workers to accept factory life, the efforts of industrialists to recruit and control a stable group of mill hands, the gradual development of a self-conscious and permanent community of industrial wage earners, the powerful sense of "family" and mutuality that emerged among the working people and the unity and division manifested in the union movement—all of these developments occurred with surprising regularity throughout the nation during the nineteenth and twentieth centuries, as Americans became an increasingly industrial people.[146]

The APC camps also carefully encouraged the sense of "family" for its employees and most probably for the same reasons.

In the twentieth century, architects and social reformers reflecting on the Pullman model questioned the paternalistic role of the company, and a "new company town" or "modern industrial town" came to dominate the industrial landscape for the first half of the century. This "new company town" was often cast in the mold of the garden city. It frequently offered a wide range of social programs and sometimes even provided support

[144] Flamming.

[145] Flamming.

[146] Flamming, 11.

for worker's homeownership. At the same time, welfare capitalism replaced Pullman paternalism, and the company's welfare department took the place of the factory owner's arbitrary acts of generosity as companies endeavored to improve the lives of workers and their families.[147]

Instead of considering the house as primarily a shelter and a workplace as earlier generations had done, the plan-book writers (and later the family reformers, who expounded ideal methods of, and settings for, child-rearing) gave the house moral attributes such as "honest" or "dishonest," thereby gaining a new and effective way to promote their own designs. They also justified the new house designs by asserting their help in fighting the westward movement of the population and the related frequent changes of residence (although this was also common in earlier generations since relocation was often necessitated by established farming practices). The primary function of the home was supportive and restorative; therefore, it was often depicted in a protected rural or small-town setting with unattended children playing in the yard. Family members were united by love and affection though they rarely spent time as a group, and when men's daily work was removed from the home, it became a place of consumption, investing meals, leisure activities, and recreation with more importance. This split between ideas of "work" and "home" led to the twentieth-century specialization of individual sex roles: the man as provider and the woman as nurturer and home manager.[148]

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[147] Dinius and Vergara.

[148] Clifford Edward Clark, Jr., *The American Family Home, 1800–1960* (Chapel Hill: The University of North Carolina Press, 1986), *passim*.

Most company towns were quite homogenous along the streetscape. Some employers required the residents to use the same materials and paint colors for their facades. This uniformity was symbolic of the modern industrial order, balanced between comfort for the residents and control for the employer. Control over the workers and the visible expression efficiency were the two principal goals of company housing in industrial towns.[149]

By the 1920s in America, the longstanding national tradition of personal expression in the home was being modified by advertising and consumerism that dictated the popular styles as a way to promote family togetherness, social prestige, and self-expression.[150] The APC was not immune to these pressures; neither did it want to discourage these traditions in its workforce. In many instances, the company town was associated with the degradation of the environment, particularly so with mining and manufacturing towns. Some investors took a genuine interest in the welfare of their workforce and strove to provide a healthy environment that promoted good jobs and family happiness while treading lightly upon the earth. The APC was one such company. It hired architects and engineers who could provide the best sort of working environment for a relatively short time that could be returned to a natural state when major portions of the work camp were abandoned. This meant demountable structures that could be moved to another site for re-use, or cheap enough materials that structures (primarily living quarters) could be disposed of at low cost when they became obsolete or no longer useful.

[149] Wright, Chapter 8 "Domestication of Modern Living," 156.

[150] Wright, Chapter 11 "Planned Residential Communities," 204–211.

As more developers expressed interest in the single-family suburban housing market, US Secretary of Commerce Herbert Hoover enthusiastically endorsed a program called the Architect's Small House Service Bureau in which architects and draftsmen produced stock plans for three-room to six-room houses and made them available at the minimal price of $6 per room. Even the American Institute of Architects (AIA) officially sponsored the bureau. The plans circulated nationwide through home magazines, special plan books, and the AIA's in-house magazine, *The Small Home.*[151]

American industrialists felt it was a good business investment to provide model towns such as Pullman, Illinois, which despite the labor problems for which it became famous was conceived as an architectural and planning improvement over previous industrial towns because spaces were planned for amenities typically only provided in wealthy suburbs: home gardens, gas lighting, public water supply, sewerage, garbage collection, and landscaping. The expenses were covered by the company.[152] The Merrimack Manufacturing Company of Lowell, Massachusetts, like many other New England mills, advertised wholesome living arrangements to entice the families of the mill girls who worked there.[153] After the growth spurt following World War I, the mill industry in the American South, especially in the Carolinas, Georgia, and Alabama,

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[151] Wright, Chapter 11 "Planned Residential Communities," 199.

[152] John S. Garner, *The Company Town, Architecture and Society in the Early Industrial Age* (New York: Oxford University Press, 1992), 7.

[153] Richard M. Candee, "Early New England Mills Towns of the Piscataqua River Valley," in John S. Garner, *The Company Town, Architecture and Society in the Early Industrial Age* (New York: Oxford University Press, 1992), 111–138. Garner gives a very thorough comparison of a number of mill towns and their housing and manufacturing structures. Later housing was mostly of the boardinghouse type, where mill girls were under the watchful eye of a matron, but in the early days stand-alone cottages and double-family homes were provided for the families of workers as it was expected that the family members would work also. Merrimack Manufacturing was one of the first to offer boardinghouse accommodation for mill girls, c. 1824.

expanded quickly. Not only was the weather milder, but labor was less expensive in the South, and there were ample supplies of unskilled labor coming from the failing Piedmont sharecroppers; however, there was the seasonal problem of the labor force leaving en masse to harvest their crops or because of dissatisfaction with the work environment. There was also the problem of racial segregation practiced in the South. All these factors impacted the housing requirements of the workers and even the way work was done in the mills. Blacks, for instance, were never hired for production work but were relegated to the most menial jobs loading trucks or on clean-up crews.[154]

In the South, Earle S. Draper became the foremost city planner to design company towns for the mill industry. His personal goals were to incorporate his higher standards so that physical conditions were improved for the mill villages, and he turned away work if the owners did not agree to his concerns for light, water, electricity, sanitation, housing, and roads. Draper's towns were therefore attractive and instantly recognizable as professionally planned towns. Because of his inclusion of landscaping, innovative housing, and public services, the families living in his towns gained a sense of personal worth. Draper's towns showed "a more sympathetic understanding their cultural heritage and rural origins"[155] at a time when every feature of a mill village was expected to have some constructive influence benefitting the workman at no cost to the worker. This was often done to forestall progressive reform movements and strikes, but it did not always

[154] Margaret Crawford, "Earle S. Draper and the Company Town in the American South," in John S. Garner, *The Company Town, Architecture and Society in the Early Industrial Age* (New York: Oxford University Press, 1992), 141–143.

[155] Crawford, 158.

work. However, Earle S. Draper was given the opportunity to design the TVA town of Norris, Tennessee.[156]

Although it was widely felt by developers that industrial housing projects should yield a return on the investment of the stockholders, the primary goal was to offer community benefits that ensured a contented and self-respecting labor force, no asset being more desirable than a stable supply of labor with high standards of industry and morality. The preferred outcome of a properly designed town was the increased prosperity of all, and "an advance in educational and moral standards."[157] This required the creation of a "complete" village not just the building of houses. Questions such as the size of the tract, its distance from a larger city, transportation routes, the proportion of land devoted to industry and recreational venues, block size and placement of streets, future use, maintenance, and housing types, were discussed fully by Cambridge, MA town planner John Nolen[158] in a book called *Homes for Workmen*, published by the Southern Pine Association in 1910.

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[156] During the Great Depression Earle Draper's villages were the sites of unionization efforts intended to protect the workers from the wage cuts which were a byproduct of a slowdown in the cotton industry. One Draper town, Spindale, North Carolina, was the site of a walkout protesting the fact that legal minimum wage requirements were not being met, and this led to other mills being shut down by a general strike organized by the labor unions in the region. Ultimately, the National Guard was called in to end the strike. Strikes were a fact of company town life between the World Wars and beyond.

[157] "Introduction," in *Homes for Workmen, a Presentation of Leading Examples of Industrial Community Development* (New Orleans: The Southern Pine Association, 1910), no page numbers. *Homes for Workmen* is a compendium of short articles (like a conference proceedings) by prominent builders and town planners intended to "present general and specific facts . . . which may be of value in directing those interested in arriving at correct conclusions" in planning their own company towns and villages. *Homes for Workmen* proved a gold mine for this dissertation because it was centered on a discussion of wood frame construction techniques and the development of worker housing in the Southeastern United States in the years immediately before the construction of the camps which were examined in central Alabama.

[158] John Nolen, "The Industrial Village," in *Homes for Workmen, a Presentation of Leading Examples of Industrial Community Development*. (New Orleans: The Southern Pine Association, 1910), 1–7.

By 1921, an economic depression had aggravated the post-war housing shortage, and the average cost of new house construction was rising. Many sociologists and planners celebrated the suburban growth that embodied a combination of small-town virtues and urban amenities in a carefully planned environment. Hoover advocated a coordinated program to relieve the housing shortage and stimulate the construction industry in 1920 with his "Own Your Home" campaign. This campaign made more funds available for veterans and expanded the Bureau of Standards,[159] which tested everything from fire-retardant materials to silver polish. It also encouraged manufacturers to standardize and reduce the varieties of building materials, published studies on home efficiency, and set up an Advisory on Building Codes to evaluate and standardize over 850 separate local codes across the country. The Division of Building and Housing (established in 1921 as a subsidiary to the Bureau of Standards) furthered this standardization and the goals of mass-production and year-round construction work on job sites. Standardization and mass production led to lower costs and more housing stock to help relieve the shortages. It also fostered curiosity about just how far mass production could be pushed. In the mid-1930s, the TVA experimented with prefabrication at the Norris Dam village, which resulted in a local manufacturing type that prefigured the

[159] Lewis Branscomb, Director, National Bureau of Standards, *Building Research at the National Bureau of Standards* (Washington, DC: US Department of Commerce, 1970). Branscomb speaks of the huge debt to Herbert Hoover in the introduction to a publication intended "to serve as a key to the work of the previous 69 years and as an introduction to the future. Included are a statement of the mission of the Building Research Division, a history of the Bureau's previous activities in the area, a description of the current program, and a summary of future objectives, together with a comprehensive bibliography." The National Bureau of Standards was formed in 1901, but when Hoover became Secretary of Commerce in 1921 he expanded the bureau by creating a new division which was "to coordinate scientific, technical, and economic research in building; to engage in simplification and standardization of building materials; and to aid in the revision of state and municipal codes." Accessed online at http://fire.nist.gov/bfrlpubs/build74/PDF/b74007.pdf on April 4, 2015.

mobile home industry.[160] At the APC camps, homes were only temporary for the construction workers. Unless a structure was useful to the "permanent operators" who handled the daily operations of power production, it was disassembled and moved to the next job site, or it was burned.

2.9 Organization by Race and Class

In Alabama, White iron and steelworkers struggled to preserve a place in the economic, social, and political spheres they believed to be their birthright. Black iron and steelworkers struggled against a class and racial system that denied them opportunities and full equality as citizens because of the color of their skin. These conflicts of class and race forced constant revision and reevaluation of the ideology of White supremacy and the concept of community that Birmingham's founders and early settlers embraced. The industrial city that eventually emerged looked much different from the "workshop town" of booster's dreams.

Planning by suburban developers in the 1920s extended to every aspect of the residential environment, and they set the standards for all other future construction from the width of the streets and their layout to the height of fences. Architectural regulations became common across the country, but upper-middle-class communities were especially likely to have aesthetic and legal regulations for restricting those who would not be welcome in the community because of racial or social status, and to a lesser degree to promote the branding of a strong sense of local community identity.[161] The APC had little

[160] Avigail Sachs and Tricia Stuth, "Lessons from the Past: A Tennessee House for the Future," paper presented at the *Construction History Society Conference* in Boston, MA November 2–4, 2012. From my notes.

[161] Wright, Chapter 11 "Planned Residential Communities," *passim.* Jesse Clyde Nichols developed large tracts in Kansas City which he placed under a self-perpetuating deed restriction which could only be changed if a majority of deed-holders voted the change at least five years before the twenty-

trouble segregating Black labor since those employees were garnered from the ranks of poor, uneducated sharecroppers and farm laborers in rural Alabama, and the work of these Black laborers was of short duration at each site. Restriction of other groups was hierarchical, dependent on job title and education. However, most of the White workers were also itinerant, except for the engineers who remained after construction of the dam was complete to supervise the daily workings of the hydroelectric plants.

Across the United States, class distinctions were seen to be important, and these were certainly evident in the sizes of the houses and materials of construction. Executives' homes were expected to be better than those of unskilled labor, and it was recognized that the ability to pay for the houses would be a factor in the outlay of expenses for different groups. The right sort of contract could make the difference in preventing a worker from quitting over a small squabble with his supervisor and at the same time allow for the sale at a reasonable time and fair price if the worker's circumstances justified it. This also would develop the reputation of the company as a fair dealer in employee relations.[162] By 1918, worker housing was in the news related to the influx of foreign workmen displaced by the war and dreaming of better lives and work in America. Headlines in magazines, discussions, and editorial comments concerning foreign workers who were immigrating to take jobs in the United States were topical.

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five-year term of the contract. The main purpose of this restrictive covenant was the exclusion of minority groups, particularly Blacks, but when studied in context, it is evident that it seemed normal at the time.

[162] Arthur G. Clough, "Planning and Financing the Industrial Housing Project," in *Homes for Workmen, a Presentation of Leading Examples of Industrial Community Development*. (New Orleans: The Southern Pine Association, 1910), 27–37. Reprinted from an article published in *New York American Architect*.

Anyone could weigh in. The Southern Pine Association published a paper by one of its members, Arthur G. Clough, containing the following:

Secretary of the Interior Lane Appeals for Better Housing for Alien Workmen:

But all the patriotic utterances will be wasted effort, unless at the same time the spirit of fair play is observed in our dealings with the alien employee. If he is housed in slum tenement or in shanties, he will have little love for a land that treats him like cattle.

All this is no longer theoretical, nor is it to be classed as philanthropy, charity, welfare work, or some effort at paternalism on the part of a kind-hearted employer. It is a straight business proposition.

Franklin K. Lane, US Secretary of the Interior [163]

In many communities, the labor turnover made housing an acute problem for company owners, according to Clough. High wages alone were not sufficient to hold the best workers because living conditions were affected by changing economic and transportation conditions after WWI. There had been an increase in the cost of labor and building materials along with a decrease in the amount of "unemployed capital" in the country. The congestion of labor in manufacturing centers around the country, lack of decent housing in these centers, and the higher wages for both skilled and unskilled laborers meant that ambitious workers increasingly desired their own homes. While the demand for adequate housing was increasing the supply was diminishing because of the higher cost to build.[164]

[163] Frank Trumbull, "Foreigner – Always? A Brother Hedged by Alien Speech And Lacking all Interpreter," (sic) in *The Nation's Business, A Magazine for Business Men*, July, 1918, Washington, DC: Chamber of Commerce of the United States, 8. Trumbull was Chair of the Immigration Committee of the US Chamber of Commerce. The quote from Secretary Lane is centered in the page and set off with doubled lines at top and bottom. After citing many statistical facts about the United States and the numbers of immigrants historically and in the present, Trumbull calls for assisting immigrants to assimilate as they are a valuable workforce and the necessity of inviting them to become citizens. The date of Lane's quote is not given.

[164] Clough, 27–37. The article was also printed in *American Architect*, May 15 and 22, 1918. 583–587, 633–656.

Class distinctions were considered when building homes (whether for executives, clerical help, skilled workmen, or unskilled labor), and the cost was adapted to the means of the potential purchaser. According to Clough, "If the house is sold to the employee at cost, the return will be in the contentment of his workers, the reduction of turnover and the building up of his good name as an employer. These abstract qualities are difficult to quantify, but projects of this sort have been highly successful."[165] However, at the APC dam construction sites, these questions were moot. Nobody expected the camps to grow into real towns. The jobs as well as the camps themselves were ephemeral.

2.10 Forms of Worker Housing and Planning

The formal layouts of house types were debated across the country. What was the best way to house non-permanent workers while keeping costs low? The answer seemed to be in planning from the beginning for transformation for other company needs, or what today we would call adaptive re-use. At the housing constructed by the Merchant Shipbuilding Corporation for the housing of shipyard workers in Bristol, PA, Carroll H. Pratt, architect, discussed the ways in which plans were laid for a comprehensive housing development to take care of the social needs of its workmen and their families: "To avoid the waste and unsatisfactory results incident to construction of temporary barracks, frames and covering were erected for buildings that would, after their temporary occupancy by construction forces, be completed into substantial and permanent forms for the shipbuilders who would follow."[166] A number of buildings were erected without interior partitions or finish, designed for temporary occupancy. (This was before1910 and

[165] Clough.

[166] Clough.

well before the *Maison Do-Mi-No* [1914] of Le Corbusier that introduced the idea of semi-perimeter reinforced concrete columns that liberated the interior as well as exterior walls from any load-bearing function and therefore freed the builder from duplicating the floor plans from one floor to the next.) These barracks were built on permanent foundations so that they could be completed for permanent dwellers with practically no waste or loss particularly since the plumbing and heating equipment was planned for this eventuality and installed in the beginning phases of the construction.[167] Since this shipyard worker housing was published in *Homes for Workmen*, it may have served as a template for the later APC camps where the proximity to larger cities offer the possibility of selling the houses to people who would stay on after the constructions projects were competed? Gorgas might be an example of this line of thought, but the houses at Gorgas do not seem to differ substantially from those built at other sites by the DCC for the APC, indicating that the APC standard was good enough quality to last into the twenty-first century.

In boarding houses built for the Merchant Shipbuilding Corporation, rooms were placed on both sides along a corridor. Some boarding houses had a large kitchen and mess hall sized to accommodate the men in adjacent houses as well. Recreation rooms were also provided on the second floor of these houses, affording the men an opportunity to refresh their bodies and minds even in the worst weather. Seven blocks of these buildings were erected, comfortably housing 2,000 men, and although the plans of the buildings were similar, the exteriors were designed to prevent the monotony common in

[167] Carroll H. Pratt, Architect, "Bristol, Pennsylvania" in *Homes for Workmen, a Presentation of Leading Examples of Industrial Community Development*. (New Orleans: The Southern Pine Association, 1910), 126–131.

other industrial developments. Varying types of other two-story buildings, all with sloping roofs and exteriors of brick, stucco, clapboards, and shingles, well-lighted and heated from a central heating plant, also had exteriors that varied sufficiently to break the monotony, and the single-family detached houses were placed around a small park for superintendents, foremen, and executives. Between the residential areas and the plant were the administration building, commissary, stores (with apartments over them), police and fire headquarters, and other community buildings such as schools and a hotel.[168]

The housing was intended to attract the right kind of workers: those who would have pride in their homes would also be most likely to take pride in their work. According to Morgan, "Now and for some years to come, the question of getting men to do your work, and of keeping them after you get them, is one of the biggest single questions the employer faces. The days of tents and shacks – of unsightly, unsanitary, inconvenient camps – are gone, or rapidly going, on any first-rate job."[169]

The Dayton Flood Prevention Project was the result of one of the most disastrous floods to sweep through the Miami Valley in Illinois, destroying over one hundred million dollars in property and hundreds of lives in March 1913. Fearing that government aid would be too long in coming, the people of the valley came together to undertake the project themselves, hiring Arthur E. Morgan, a civil engineer, who later oversaw the construction of the Pueblo Dam in Colorado and became the first chairman of the Tennessee Valley Authority (1933–1938) to construct five large dams to control the

[168] Pratt.

[169] Arthur E. Morgan, Chief Engineers, Miami Conservancy District, "Modern Labor Camps on the Dayton Flood Prevention Project," in *Homes for Workmen, a Presentation of Leading Examples of Industrial Community Development*. (New Orleans: The Southern Pine Association, 1910), 149 – 154.

Miami River and its tributary streams.[170] A camp was constructed at each of the five dams. In most cases, the suburban camps had access to nearby cities by railways and interurban lines, and unlike the APC camps, it was expected that these camps would change over time into true suburban villages.

The cottages provided at Dayton were of five designs running from the number one, which was the smallest and least expensive, to the number five, the largest and most costly. One hundred and twenty-five cottages were constructed, and most were rented several weeks before they were scheduled to be completed. Bunkhouses were provided for single men, and these varied in size to accommodate eight, twelve, or twenty-four men. The single men could eat at the company mess hall or make other arrangements for their own food. The hotel attracted commercial travelers and working men, perhaps because it served appetizing food. Each camp had a water system provided with well water pumped into each cottage and bunkhouse. A sewerage system included a sedimentation tank and sand filter before dumping its contents into the local stream. Electric light and power were supplied by the Dayton Light and Power Company. Each camp had the usual company store, "a first aid cottage hospital, a community hall where public meetings, movies, dances of other entertainments could be accommodated, and a schoolhouse for the children."

'[171] In many ways, this is the precedent most similar to the APC camps, perhaps because of the nature of the work.

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[170] J. David Rogers, The 1913 Dayton Flood and the Birth of Modern Flood Control Engineering in the United States, accessed February 10, 2019, http://web.mst.edu/~rogersda/umrcourses/ge301/dayton%20flood-updated.pdf.

[171] Morgan, 154.

2.11 Comparative Data from the Bureau of Labor Statistics

A representative study of 213 separate companies was made in 1916 by the United States Bureau of Labor Statistics; it included subsidiary companies of large holding corporations. The study found that these companies employed 466,991 men of whom 100,645 were housed in company houses. The following statistics were taken from a survey of 423 plants.[172] Unless otherwise noted, this survey is the basis for the figures given in this chapter.

The survey found that town planning was not given much consideration in most cases, but town planners had been consulted in 15 percent of companies studied, and most of these were manufacturing companies, not mine operators. (It is probable that because mining operations were typically not situated in areas suitable for laying out orthogonal street systems that the implementation of town planning ideas would have been too expensive.) Two-thirds of these developed company towns were located on undeveloped land requiring the layout of completely new plats; 6.8 percent were located in suburban areas, and 13.1 percent in city subdivisions; 6.8 percent in lots already laid out within city blocks, and 4.2 percent were in a combination of these different types of development. Generally, these towns were laid out on a gridded plan without regard to site contours and in some cases, grades of 14 percent were found.

Streets were almost always ample in width; in fact, they were frequently too wide, making the construction cost unnecessarily high. This could be justified to protect from

[172] Leifur Magnusson, "Housing by Employers in the United States," Proceedings of the National Housing Association, 1917, 38–48. Magnusson was a Special Agent for the US Bureau of Labor Statistics. He also summarized his findings for the United States Bureau of Labor Statistics on Housing by Employers in the United States in *Homes for Workmen, a Presentation of Leading Examples of Industrial Community Development*. (New Orleans: The Southern Pine Association, 1910), 39–48.

fire, and the cost could be kept lower by paving only the central portions, keeping the remainder available for later improvement, or initially calling for deep setbacks and later decreasing the setbacks was another way of controlling the use of the land along the roadways.

Restrictions usually had to do with the keeping of livestock, types of fences, cost of houses, and so on, but some employers decided against all restrictions on the grounds of the danger of establishing paternalism based upon the fate of Pullman, Illinois. As for race relations, at least one employer in the South alternated Black and immigrant families in his town to avoid clannishness and quarreling of neighbors. Some company towns mixed races haphazardly, assigning the next house to the next comer, without regard to class or color.[173] However, Blacks were nearly always segregated, as were Mexicans in the Southwest.

Public utilities were provided by the majority of companies studied by the US Bureau of Labor. Sanitary sewers were provided by only 9 percent, and storm sewers by only 50 percent. Electric lights were provided by 83 percent and gas by 24 percent; water was supplied by most, except in 6 percent only by wells and outside hydrants. No street paving was done in 45 percent, and sidewalks and gutters were not provided in 19 percent of the companies studied. In about 85 percent of the towns, the company provided police protection for the residents, but no hospitals or playgrounds were found in over one-third

[173] Marietta Monaghan, "Solving the Problems of Housing for the New Workforce in Alabama during the Years 1890–1950" (Master's thesis, The University of Alabama, Birmingham, AL 2004). This system did not last long, however. Within a few years, Black workers and their families were relocated to another section of the town and Whites were concentrated in the original section as the infrastructure of the town was developed. Separate (but fairly equal) schools, churches and recreational facilities were provided to both groups.

of the companies studied. In general, the employers only assisted in the provision of schools and churches that were administered by the residents. APC camps were sometimes supplied with electricity before the camps were complete, and most had sanitary sewers and gutters if not paved roads. The company provided hospitals, schools, and playgrounds associated with the schools in all the camps as well as in-house security provided by APC guards.

Most towns consisted of uniform styles of houses and rectangular grids; in general, planners disregarded the advantages of vegetation of any kind. Public space was not something considered of value in most of the towns surveyed. Parks and landscape beautification were seen by the companies who developed the towns as expensive frills, something that company towns rarely possessed. Besides, public space was potentially dangerous, particularly for company owners who wanted to limit the possibility of strikes. Trees, grass, and shrubs could have softened the unsightly bare courtyards and eliminated some of the menace to health caused by dust. However, there was not a tendency to crowd houses together on small lots, perhaps as a fire precaution, but this varied by type of company and the location.[174]

The APC was very forward-looking for its time, providing some maintenance of the public spaces with grass mowing, picnic tables for company events, and so on, and

[174] Magnusson, passm. Copper mining companies in Michigan and Tennessee, coal operators in Ohio, West Virginia, Pennsylvania, Indiana, Colorado, and Wyoming, were provided with lots that were generally 50 to 60 feet wide, and in mining regions in the North few lots narrower than 50 feet were found and few less than 40 feet in Alabama. Narrower lots of less than 40 feet were found in other industries, with the smallest being those built by explosive manufacturers (who provided row houses), with one third of all lots being between 20 and 25 feet in width. Because of the dangerous nature of the work, the most spacious margins of safety would necessarily have been accorded the manufacturing structures to limit the catastrophic effects of an explosion, leaving less land for the company to devote to housing. The survey does not mention where these exemplary manufacturing towns were located, but it would be logical to build them where the plant had access to transportation (railroad or river) but not too near a town.

dust and dirt of all kinds were abhorred as a public health nuisance as were mosquitoes, which were regularly sprayed. The camps were laid out according to a hierarchy, but attention was paid to the topography and landscape features, which might be seen as amenities or that would be cost-prohibitive to remove, resulting in clusters of homes or communal structures with trees left standing in a park-like setting between clusters.

The US Bureau of Labor study found that the company house tended to be standardized as to materials, colors, and type with certain characteristics seen in different sections of the country. In the eastern states, there was a difference between the houses of manufacturing towns and mining towns, but in the north and south, there was "no difference." Unfortunately, the "differences" are not explained in the government survey. Of the 53,176 individual dwellings 48 percent were single-family homes, 36 percent were duplex or double dwellings, 11 percent were row houses and in the remainder, 4 percent are all other types combined with 1 percent not reported as to type.[175] One reason for the perceived difference between the manufacturing and mining towns might be a result of the type of work performed in each. Mining is dirty work and occurs belowground. Mines are located where there is access to the ores but not usually in a developed area; mining towns tend to sprout up where the ores are "discovered" by prospectors. Manufacturing tends to be most profitable where a railhead or other transportation is available to ship the product; therefore, in an already developed area where other citizens might expect a certain standard to be met by new housing developments and companies would be more sensitive to public relations, housing would have been of better quality or appearance.[176]

[175] Magnusson, 38–48.

[176] See also: Dinius and Vergara, 6–7. "Manufacturing towns and resource towns developed very differently: manufacturing companies commonly knew their labor requirements and could design a

2.12 Housing Types

As Dell Upton and Michael Vlach point out in the introduction to their encyclopedic discussion of the vernacular, according to Nicholas Pevsner, the vernacular is "*not* architecture," whereas Amos Rapaport says that "only about 5 percent of the world's built environment – the portion designed by architects and built by engineers – is not vernacular."[177] Elite architecture and that of everyday life are nevertheless united because both are constructed according to social conditions and concomitant cultural ideas. To this point, Upton and Vlach add, "A builder builds a bungalow to foster an informal and comfortable domestic life as a way of reinforcing salutary social values."[178] Housing for working-class employees is nearly always of the vernacular type because of cost, availability of materials, and the status of the working man. The vernacular is the style of the common folk in the particular environmental and social conditions for which it is built and perhaps not suited to another climate or culture. It is constructed of local materials and with techniques learned over generations of trials. It has stood the test of time and works well in its place.

The most prevalent form of employee housing erected before 1881 was the row house, and the double house type was the second. The proportion of the row house had declined irregularly over time, and this was noted in the survey. The frame structure was most prevalent with brick less than 10 percent, and all other types of materials combined

company town to meet those needs, while resource-extracting companies went through an exploratory phase to test the potential of a location and establish market access. Simple mining camps only became mining towns as the result of a re-design once the company knew that it could generate profits in the long run."

[177] Upton and Vlach, *Common Places*, Athens: The University of Georgia Press, 1986, xv.

[178] Upton and Vlach, *Common Places*, xxii.

less prevalent than brick. Also, 30 percent of these company houses had four rooms; five-room and six-room houses accounted for a little over 15 percent each so that two-thirds of all houses were four-, five-, and six-room houses. Less than 1 percent of houses were one-room houses.

The most typical company houses had four, five, and six rooms. In 1916, 30 percent of the four-room houses rented for less than $5 per month, 40 percent for less than $6, 58 percent for less than $7, and 76 percent for less than $8. Five-room houses, which rented for less than $8, accounted for 63 percent, and 43 percent of six-room houses rented for less than $8 per month, making well over two-thirds of company houses within the means of the lower-paid unskilled laborer, which the survey found to average around $32 per month. Gas or electric light, bath, water closet, sewer or cesspool, and water inside the house was reported in 17.3 percent of all company houses, and some had laundry tubs and hot water connections, but there was no modern convenience other than gas or electric light in 22.3 percent of the houses and 39.2 percent had no modern sanitary conveniences. About 10.5 percent did not report whether or not they had sanitary equipment. The fact that only 17.3 percent of the respondents claimed to have any sanitary conveniences was certainly because of the great expense in providing sewers and filter plants. The APC camps were built with sewer systems to handle sewage and rainwater, which were both routed out to the river below the dam, more an indication of the weather in Alabama than the need for modern conveniences. However, the APC was also cognizant of the effect raw sewage would have had on visitors to the camps and the effect it would have on the public image. The APC wanted

to be in the public eye as much as possible but not because of a bad sanitary situation or an epidemic in the camps.

While most houses (90 percent) were of frame construction, some employers reported experiments with concrete and hollow tile construction. The concrete houses cost as much or more to build as brick and were reported to be cold and damp. The hollow tile with stucco exterior was more successful, and the stucco could be tinted with colors for variety. Construction costs varied widely over time and location especially with recent changes in the materials markets and local conditions. APC also built with hollow tile construction at some of their camps, but it seems this practice was abandoned in favor of less expensive (and for them very plentiful) wood frame construction.

Sometimes good company developments were found by the US Bureau of Labor to be poorly maintained; conversely, poor housing accommodations could be redeemed by good systems of upkeep. Fresh paint and landscaping, garbage collection, and contests to reward those who maintained outstanding gardens augmented repair and upkeep programs implemented by most companies, some of whom supplied fences for each dwelling to ensure uniformity. Other companies enforced a policy of no fences so that grass cutting by maintenance crews could be accomplished speedily and safely. The APC encouraged employee loyalty through contests for the most beautiful or best-kept yards and a trash and garbage collection schedule managed by the company. These practices also resulted in the APC's reputation for healthy and sanitary conditions for all employees in an environment conducive to outbreaks of malaria and typhoid fever.

Practically all companies rented houses to their employees; selling houses was possible only where the industries were more permanent, or for instance, like the APC,

where some elite employees were brought in after the establishment of a permanent job schedule was possible. Where houses were offered for sale to employees, the prevention of speculation in real estate was usually handled by the requirement that a house be built within one year of purchase.

2.13 Financing the Project

Housing did help maintain a steady supply of labor. Costs of construction relative to payroll were studied by the US Bureau of Labor and found to be roughly one-third of yearly payroll if the employer expected to house one-half of all employees. If the employer must house all employees (as at the APC sites), he had to invest two-thirds of his yearly payroll. His gross return on this investment ran about 8.3 percent ranging from a maximum of 20 percent in Alabama mining companies to 6.2 percent in houses belonging to five steel companies in Pennsylvania and Ohio. The Bureau of Labor Statistics Study found that most companies agreed that supplying housing meant that a better class of workmen, who were more stable in keeping their jobs because they were contented, usually married, and more loyal to the company, could be better controlled and would help advertise the company favorably before the public. During a depression, the employer could lower rent to offset reduced earnings of the men, therefore, keeping men who could quickly respond to an upturn in home sales activity.

One significant result of improving company housing was noticed by the surveyors to occur after an extended clean-up campaign: once tenants experienced the added comforts of clean streets and alleys, removal of garbage and rubbish, new fences, fresh paint, and repaired exteriors of their homes, they had more pride in their maintenance of the interiors of the houses as well. Many employers recognized that a

social responsibility on their part came with the provision of housing in company towns particularly when these houses were located in isolated and impermanent towns where the shifting character of the labor force and the absence of local self-government threw the most responsibility on the employer. It became necessary for the company to control or at least dominate life in such communities. In manufacturing communities such as Corey-Fairfield or Bayside (both located near Birmingham, Alabama), which were connected to shopping, recreation, and community centers nearby, the employer had less responsibility. The advantage for the employer, who attended to the needs of his workmen and their families by providing adequate and comfortable housing and social outlets with regular maintenance, was clearly evident to Magnusson. Successful employee relations could be obtained by planning and implementing the correct character of the company town.

To control costs, exterior variation on a standardized plan could be made by 1.) Alternating the position of houses relative to the street, for instance, a gabled house could be turned so the gable faced the street or the side, 2.) Varying outlines of porches and dormer windows, 3.) Alternating roof forms: gabled, hipped, gambrel, or flat, 4.) Alternating single and double houses, 5.) Varying color schemes, and 6.) Varying the material of construction: frame, brick, block, concrete, and stucco upon the frame in different configurations. These variations were infrequently employed by the APC possibly since the company wanted to promote camaraderie in the camps and because the streetscapes would vanish in just a few years.

Richard Henry Dana, Jr. (of Murphy and Dana, Architects, New York), advised that the best suburban house for the small wage earner was, first of all, an economic

problem: from the cost of land to the type of house (one-family, semi-detached, two-story duplex or row houses), materials of construction, the plan and interior finishes to whether to have the dining room and kitchen as one, or separately (together was best), and he showed floor plans and perspective examples to demonstrate the best solutions.[179] Dana's example houses were typically two stories with a central staircase (two if the house were a duplex) and gambrel roofs. One drawing shows a high-pitched gabled roof with shed dormers and a lean-to on the rear. The example houses were designed for the National Americanization Committee Housing Competition. The houses appear substantial and capable of long, useful life but were not within the financial reach of the typical small wage earner.

2.14 Conclusions

General trends in employee housing were shared through publications and word of mouth in Alabama where company towns sprouted up along streams and in the city of Birmingham. Workers could be controlled in company towns through benevolent policies and progressive behavior from the owners and managers, or they could be disastrous, especially where owners and management focused solely on the bottom line at the expense of the employees. By the 1920s, professional designers were seen as necessary to ensure the company towns and villages were going to be able to perform as needed. Everything was left to the discrimination of the planners and management who were able to control the placement of public and private spaces and, therefore, the lives of the inhabitants. Regulations governing cleanliness and order and when and where to eat,

[179] Richard Henry Dana, Jr., "The Best House for the Small Wage Earner," in *Homes for Workmen, a Presentation of Leading Examples of Industrial Community Development*. (New Orleans: The Southern Pine Association, 1910), 88–96.

sleep, and shower were used to mold the workforce into model citizens, bringing increased production of higher quality work, better health, and a stable and loyal workforce along with prevention of attempts to unionize.

A long history of company-built employee housing preceded the APC camps, going back to the Industrial Revolution. All had the same goals for an improvement of employees' production, but the APC directors were more unique in their approach. The APC employees had considerably more freedom within the confines of the camps than many of their colleagues in the cities, and the APC had a mandate: the betterment of the lives of all the citizens of the state. The company management and investors felt a social responsibility to empower all employees and all who purchased electrical power in the state. The APC additionally sought to retain workers skilled in their trades to avoid spending more time and money on training replacements. However, not all employees were treated fairly. From today's point of view, Blacks were not given the same status as Whites although, by the standards of the day, the APC was careful to be as fair as they could. Treatment of Black workers was much better at the APC than they would have expected in their hometowns and were seen as very progressive through the lens of the 1920s and 1930s. This will be discussed in more depth in Chapter 5.

The mill towns designed by Earle S. Draper must have had some influence on the APC designers. Draper's towns were intended to provide the inhabitants with a sense of self-worth and community benefits that kept labor content in very similar ways to the APC designers' plans. The APC camps contained amenities that would ease the burden of living away from family and friends in the cities. The APC managed to strike a balance between cost and comfort in their camps, resulting in a manifestly loyal and happy

population by remaining open to and connected with their employees. Employee loyalty was such that work weekends when offered to the general population of workers at a plant typically resulted in upgrades performed at no cost to the company except for materials and the food served during a free weekend at the camp.[180]

[180] "Camp Mitchell Becomes a Recreation Paradise," *Powergrams*, March, 1924, 1–3. This article contains such a call for help and the confident expectation that men will show up.

CHAPTER 3. HOUSING THE APC WORKFORCE

This portion of the dissertation will focus on houses at the worker villages as a way to evaluate the quality of life afforded to the workmen (and their families) and to illustrate the several types of houses and the various iterations of style and type that were considered to be improvements during the study period. The changes, as were the changes in the schools, were in response to changing demographics, which were expected and planned for by the APC.

Workers needed homes for the duration of their work contracts at the APC camps. To attract men with families, small houses were constructed for the use of the workers and their families. Attracting the best class of labor and preserving their "producing power" was the subject of a prominent town planner's talk presented at the Southern Pine Association's meeting in 1910. It echoes the sentiments of many Southern managers and stockholders of the era, who felt that desirable conditions (i.e., adequate housing, a safe and secure working environment), the right kinds of workers are attracted and maintained, and their efficiency is increased.

Each village was planned by the APC planners and surveyors to have its own style and arrangement according to the topography upon which it was to be constructed. Hierarchies of job position, racial background, and education levels were apparent but not to the extent taken at other workers' villages in Alabama. For instance, Sloss Furnaces in Birmingham had a system of identification that could not be ignored. The houses were color-coded and lined up in straight rows according to the job category and race of the occupants. (At Sloss, the colors signified the race of the occupant: red houses for Blacks

and yellow houses for Whites.)[181] The intent at the APC camps was slightly different and was a product of the topography once again. Alabama summers are hot and humid, but the breezes blowing through the forest canopies at higher elevations are far more pleasant than the wearisome mosquito-laden marshes found at lower levels, especially in deep ravines and valleys where the air cannot easily move. Most worker villages in Birmingham housed the Black laborers nearer to the worksites, which were hot and dirty and often smelled of sulfur and other odious gasses, by-products of the iron and steel industries. Fear of fire and explosions may also have led to the decisions taken by Birmingham planners, who owned the properties and could more easily afford to replace the less-expensive houses of their Black workers. Others housed Black laborers in the most distant areas from both the worksite and the village center to give Whites the most convenient and less physically demanding transit to work and leisure centers. Whatever their point of view, the management invariably gave privilege to Whites. Birmingham did not have the advantage of acres and acres of land available for company villages, so space was not given over to anything that did not produce a profit.

According to John Michael Vlach, slaves had historically taken an active role in the definition of their territorial spaces via the opportunism afforded by unsuspecting Whites. The plantation landscape was chiefly the creation of slaveholders, but Vlach argues convincingly that slaves imbued this landscape with their own meanings. Their subtle acts of appropriation constituted one of the more effective strategies of slave

[181] Notes from interview with Alonzo Gaines, steelworker, as recorded by the University of Alabama at Birmingham Oral History Research Office, 1984.

resistance and one that provided a locus for the formation of a distinctive African American culture in the South.[182]

Vlach found abundant documentation in the archives of the HABS collections of the slave buildings and associated spaces he studied. Despite gaps in the HABS collection, there was critical information to be gleaned from what was there among the professional photographs, measured drawings, close-up photos and detailed drawings, and spatial relationships between structures. Most of these images and drawings were made during the 1930s. The time frame coincides with most of the APC camps studied in this dissertation. Vlach was able to develop an almost palpable sense of how the buildings impacted and affected the lives of their inhabitants both during the time of slavery and later when they were occupied as sharecropper cabins. He paired some of the studied structures with oral histories recorded in the late 1930s and early 1940s that contained descriptions and memories of the places the interviewees lived or worked. As he said, he "used wherever possible, the old words of old Black people to interpret their old buildings."[183] In the late 1980s, when Vlach was researching his book, there were not many architectural histories that discussed Black architectural sites. As the architecture of the "big house" (the slave-owners home) defined and yet overlapped the space of the slave cabins, the permanent operator's houses served to define the shortcomings of the Black temporary worker housing in the APC camps and everything in between. The

[182] John Michael Vlach, *Back of the big House, the Architecture of Plantation Slavery*, Chapel Holl: The University of North Carolina Press, 1993, xi.

[183] Vlach, in *Gender, Class, and Shelter, Perspectives in Vernacular Architecture, V.* Elizabeth Collins Cromley and Carter L. Hudgins, Eds. Knoxville, TN: The University of Tennessee Press, 1995, xiii.

arrangements of the camps are in some ways reminiscent of the plantations studied by Vlach.

Slave cabins were often laid out in grids on the lower ground below the big house by their White owners where they resembled little villages typically located some distance from the planter's home.[184] At the APC camps, the Black housing was invariably removed at some distance from the White camp, on a lower topographical level of poorer drainage, and the smallest and least expensive that could be supplied. At Jordan Camp, the site would allow easy surveillance, so a police station was located at a bottleneck where Black employees could be checked off a list as they walked past on their way to work.[185] In an interesting twist to this idea, the Black quarters at the APC camps took the topography into consideration, but the (very temporary) tent camps of the construction workers who built the houses and offices (mostly White) were laid out in military fashion wherever a suitable spot was found.

By building decent quarters some slaveholders thought to stave off rebelliousness and discontent in their slaves. Vlach found that planters wanted to coerce their slaves into more productive and obedient workers. This is the same as the stated goal of the APC directors.[186] By offering them at least equal or better than the homes they left, the APC hoped to attract "the right kind" of White employees to the camps although it is apparent they did not feel it necessary to provide the same housing for Black workers. Many of the

[184] Vlach, 12–13, 14. Vlach found that if the planning were left to a Black overseer or to the slaves themselves, the plan was very irregular with cabins placed at odd irregular angles to each other, and in more distant secluded places among the trees, prompting the exasperation of the slave owners.

[185] See the map for Jordan Dam.

[186] John Michael Vlach, "Snug Little House with Flue and Oven: Nineteenth-Century Reforms in Plantation Slave Housing", in *Gender. Class and Shelter*, Cromley and Hudgins, eds. Knoxville, TN: The University of Tennessee Press, 1995, 118.

old slave cabins in the south were still in use, occupied in the 1920s and 1930s by sharecroppers (Figure 3.1). The state of their repair is evident in the photos of the HABS photographers. The buildings are old and sagging, chimneys need chinking, and the women who posed for the photos outside their homes look worn out too (Figure 3.2).

Figure 3.1 Black sharecropper cabin, Hale County, Alabama, 1930s, Walker Evans/HABS.

Figure 3.2 Colbert County, Alabama, 1935, Alex Bush/HABS.

If they had been kept in better condition, the old slave quarters might have been comfortable. Examples from Alabama have brick or stone chimneys on the gable end and both ends if the house is a double-pen dog trot. Roofs are tin or shingled with split shakes and easier to spot repair than the newer rolled asphalt roofing used by the APC. All are raised above the ground for ventilation and to prevent infestations of termites. Some are hand-hewn squared log cabins, but even those have lap siding on parts of the house. Some are chinked and painted with a coat of lime to ward off bugs, but most have holes where the chinking has come out, and a window hangs askew in one example although most do not have windows. The styles are vernacular expressions of durability and thrift,

warm enough in winter with a fire roaring in the generously sized fireplace that was used for both cooking and heating the one room.

Vlach also notes that the overseer's houses were often placed between the slave cabins and the planter's house. The overseer was tasked to work the slaves hard, but not too hard so that the best crops could be made each year. Overseers were useful to the planters not only because it lessened their personal labor but because it shielded the planter from psychological stress and let him feel he was concerned with the slaves' well-being.[187] A similar buffer was employed at the APC camps. The house of the superintendent was located at the nexus of work and leisure. This placement was intended to make the superintendent more available if there were any kind of trouble but also so he could keep an eye on the daily operations of the camp, its occupants, and the worksite. This responsibility was explicitly expressed at Gorgas where the superintendent's home was placed at the curve between the White camp and the Black camp across the slough on the road leading down the hill to the steam plants (see Figures 3.15 and 3.17).

At the APC camps, White workers might have walked farther to work, but they enjoyed a friendly camaraderie with their peers as they walked, greeting the wives and children on porches and in the yards, later getting the latest from the retiring shift as the job stations changed hands. They took in the inspiring views across the hillsides and soaked up the connection with natural environments and fresh air. Too, the APC regularly entertained visitors at the camps, certainly at the dedications. The White worker's portions of the camps were landscaped and maintained as if they were expecting an inspection by visiting investors at any time. The APC encouraged all employees to

[187] Vlach, 135.

keep their homes and gardens in good condition through several contests and public service campaigns.

Aside from the plan drawings and photographs extant in the APC Archives, this writer had the luck to obtain a copy of the memoirs of a man named Royce Dean Northcutt, Sr., who grew up in the Gorgas camp. The memoir has been invaluable for the project because it describes details of life and the use of the houses by their inhabitants with a few of his photographs included to illustrate his comments and show the parts of houses that perhaps the APC did not want to memorialize. This memoir allowed the portion of the dissertation dealing with the houses at Gorgas to be the longest and most definitive and provided insight into the other camps. The other camps had much in common with life at Gorgas as they were doing the same work for the same company at nearly the same time, and many men moved from camp to camp as their jobs were relocated to the next construction site. Understandably, the APC was happy to reemploy already trained and tested workers because that meant they could begin working proficiently at their jobs without delay.

One of the most essential requirements for the APC's successful power plant construction was housing the workmen on-site. To assure men would be available in the numbers needed, it was necessary to provide better than average facilities to entice the best men to such unfriendly locations detached from social outlets especially if they had their families with them. Few working-class men owned automobiles during the first half of the century in Alabama, and the roads were very poorly suited for automobile traffic. Provision of on-site housing was a necessity for recruitment.

Normally, the first housing on the APC construction sites appeared in the form of tents, but more suitable structures were provided as the camp population grew. Over time, and as new camps were constructed, there were several different residential iterations to meet the needs of the changing camp populations. Technological advancements in disease prevention and equipment upgrades also meant corresponding improvements in housing.

Other locations have received more attention, for instance, company housing at Boulder City constructed for Hoover Dam and Cove Creek (now Norris) Dam on the Clinch River in Tennessee. The Tennessee site is still in use as the town of Norris with a population of around 1200. It was planned in 1931 to reflect the regional vernacular so local people would feel comfortable living there. The plans were compact and modern and "include a number of experimental materials used as finishes".[188] An experiment in new town development, Norris survives as a bedroom community for those who commute to work in nearby towns. Constructed as a work camp for Boulder Dam (now Hoover Dam), Boulder City today boasts a population of around 15,000, and likewise functions as a bedroom community for Las Vegas twenty-six miles to the north-west.[189]

Most of the APC worker villages were not so fortunate. The housing served both minority and White workers and their families; the camps changed in form and layout as the needs of the resident population changed, reflecting the variations in the type and

[188] Marian Moffat and Lawrence Wodehouse, *Built for the People of the United States: Fifty Years of TVA Architecture* (Knoxville, TN: catalog for an exhibition at the School of Architecture, University of Tennessee, 1983), 11.

[189] https://en.wikipedia.org/wiki/Boulder_City,_Nevada

numbers of the workforce present at each camp, but none of these worker villages survives in a state anywhere near intact.

The houses themselves will be compared as to configuration, site placement, and materials of construction to illustrate the evolution of the APC's goals for the most efficient and productive designs. The bulk of the input for design changes seems to have come from the director of medical services, Dr. Samuel R. Benedict, who oversaw a stable of company physicians and also directed the sanitary provisions at all the APC construction sites and employee villages. His ceaseless endeavors to provide a sanitary and safe environment for the workers and their families was informed by his international standing and reputation and represented research and planning far in advance of most worker camps in the southern United States.

Another driver of the changes in house design was the technological advancement in home appliances. Of course, the APC was in the business of selling electrical power, so the homes were furnished with all-electric stoves, refrigerators, water heaters, and later, electric washers and dryers. Though these homes were remotely located, they were nonetheless felt to be prototypical or were used as advertisements for the sale of electrical appliances across the area served by the APC, an indication that the APC camp houses were perceived to be at the forefront of living standards in their local areas.

Passing attention has been given to the villages by authors whose work concentrates on the history and illumination of the founders and management of the company, such as Leah Rawls Atkins, whose book, *Developed for the Service of*

Alabama, was the introduction that began this research project.[190] Harvey H. Jackson, III has written several books on the rivers of Alabama[191] that compile a history of the construction of the hydroelectric dams along the Coosa-Alabama River systems.

Although neither author spends much time on worker housing, their attention to the greater picture, the context of the history of the APC and the insightful comments on the major players of the early days of the company helps to understand the choices made in terms of what amenities were provided to these workers and why.

3.1 Lock 12/Lay Dam: 1910 to 1914

At Lay Dam, the construction history report relates the construction and disposition of the houses in the camp. There were five distinct sections: the White camp, containing the commissary, White mess hall, bunkhouses, foremen's houses, family houses and houses of the contractor's staff, an ice plant, bakery, storehouses, and so on. The engineer's camp was "off to itself" and had one bunkhouse, family houses for the staff, the engineer's mess hall, an office, and a special house for guests and visitors. The "negro quarters" (sic) was about two-tenths of a mile from the White camp by the railroad tracks and about 400 yards away from the camp for foreigners (Swedish carpenters who wanted to live by themselves.) Later the foreign laborers went back to the northern states where the climate suited them better, and their camp was combined with

[190] Leah Rawls Atkins, *Developed for the Service of Alabama – The Centennial History of the Alabama Power Company, 1906–2006* (Birmingham, AL: Alabama Power Company, 2006.)

[191] Harvey H. Jackson, III, *Rivers of History, Life on the Coosa, Tallapoosa, Cahaba and Alabama* (Tuscaloosa, AL: The University of Alabama Press, 1995), and Harvey H. Jackson, III, *Putting "Loafing Streams" to Work, the building of Lay, Mitchell, Martin, and Jordan Dams, 1910–1929* (Tuscaloosa, AL: The University of Alabama Press. 1997).

the "negro camp." At its highest point of concentration, the camp contained around 1000 people.[192]

Another camp near the dam (Zion Quarry) was built for the quarrymen who supplied raw materials for the dam construction. The same general types of housing were provided there except for the Italian workers, who were supplied with "little kitchens" so they could cook their own food. The Black workers were given tents with wooden floors and wooden sides going halfway up.[193] The wooden floors were raised off the ground enough to keep the damp and mud out, and the wooden half-walls would store possessions and supplies leaning against the wall in ways that a tent could not provide. It is difficult to imagine that a tent could protect from rain, wind, and cold in the same way a gabled tin roof would have; however, the tent canvas could be rolled up or down to adjust ventilation and light, giving the inhabitant more control over his living arrangement.

The buildings in the camp were typically placed along the higher ridges to ensure rainwater runoff was directed toward the river or creeks and because it made sanitation easier. It was found that some of the bunkhouses were too large to afford proper ventilation at night while men slept, robbing them of their energy and motivation to work. It was also recommended that in the future, the "negro camp's" large mess hall and several bunkhouses were not the best plan going forward. Instead, a large number of small single houses had been found to work better both by other contractors in the area who were engaged in similar work and by the McArthur Brothers Construction Company

[192] *DCC Construction History Report*, 1912–1925, 29–31.

[193] *DCC Construction History Report* 1912–1925, 32.

during the construction of Lay Dam, where small single houses had been provided later in the project.[194] The Black workers surely saw the White men living with their families and wanted the same arrangements for themselves. Ultimately they got their way as labor was a continuous problem for the APC, making Black worker's position stronger and forcing the company to supply individual houses for Black workers.[195]

The writer of the Construction History Report admits to one error in planning. The houses were built too close together and a fire that broke out in the "negro quarters" spread from one house to the next and ended in the destruction of six. It should have also been noted that water was not as easily accessible in the Black camp. At Lay Dam, all camp buildings were constructed of wood and were well ventilated and cared for. Rent was paid by the workers in all quarters except for the bunkhouses. A separate charge for food eaten in the mess halls was handled by subscription/salary deductions. Board and accommodations in the bunkhouses cost $5.00 per week for Whites and $3.50 per week for Blacks (but the Black mess hall had to use up "the left-over material from the White kitchen.").[196]

3.1.1 Bunkhouses

Photographs of the housing at Lay Dan suggest that the construction was rustic but adequate for a camp atmosphere in the 1920s. The engineer's bunkhouse was raised on tall pilings to level the floor above a steep slope (that appears to have been partially graded) and to provide ventilation and some protection from termites. A porch across the

[194] *DCC Construction History Report* 1912–1925, 30–31.

[195] Jackson, *"Loafing Streams,"* 27.

[196] *DCC Construction History Report* 1912–1925, 31.

gable end offered shade and rain protection and balanced the façade with four large windows and a central door. Evenly spaced windows ran along the long walls, and a gable vent exhausted the warmest air. The shiplap wooden siding, probably still green (not kiln dried, so not the best quality and prone to warping and cracking) would be painted after the structure was finally completed (which might be after it had been occupied.) The hillside fell away on either side of the bunkhouse, but more steeply on the left side. The steps to the porch were also centrally placed (Figure 3.3).

The Engineer's Camp, in a photo dated December 1919 (Figure 3.4), shows the rustic collection of bunkhouses arranged around a clearing in the tall Black forest on top of a ridge. The camp was neat with fuel and water barrels neatly stacked and garbage cans placed inside a board fence where they would not be easily turned over by wild animals. Stumps of trees were left in place, but most brush from the logging operation has been dragged away.

Figure 3.3 Engineer’s bunkhouse under construction. Lay Dam, No date.

Figure 3.1 Engineers' camp, Lay Dam, December 1919.

The Black bunkhouse was similar but did not have shiplap siding, only vertical planks with cracks. It was still sturdy although the ventilation was clearly not as good. The White bunkhouse had many windows along the front and sides, providing cross-ventilation and a front porch that covered the windows in front. There were trees for shade and a gable vent, probably one at both ends. The image does not show the other end of the building (this is the only photo in the archives of this building), but the bunkhouses in other camps were designed for cross-ventilation, a common feature of Alabama houses in the days before air conditioning. The Black bunkhouses were provided with one small window on the side facing the road and perhaps a small porch, judging by the structures beyond the first one. There are no extant drawings showing

other wall openings. The Black bunkhouse was placed on flat ground and raised only a minimum height from the soil so only the slightest movement of air was possible beneath the floor. The roofline does seem much higher than the White bunkhouse; nonetheless, based on the proportion of the person standing beside the building (Figure 3.5). (Might be a child?) Without drawings of the buildings, there is little else that can be definitively known. Although there is not so much evidence of the other houses constructed for workmen, one fact puts the size of the camp into perspective. The camp grew in size as the work on the dam progressed, and at its height, Lay Dam's camp boasted the largest and most cosmopolitan population living together between Birmingham and Montgomery. It was also the most segregated. In small Southern towns, Blacks and Whites usually lived close together, more separated by tradition and custom than by space. Here at Lay Dam camp, the camps were divided along ethnic and racial lines,[197] which were made very clear by the well-defined subdivisions of space along borders such as the railroad tracks and the distance from the White camp.

[197] Jackson*, "Loafing Streams,"* 25.

Figure 3.5 Black bunkhouse under construction, Lay Dam, 9-16-1913.

There are a few images of higher quality houses, which can give an idea of the hierarchy of the camp's social structure. The "permanent operators" were the electrical engineers who kept the electricity flowing from the dam's generators through the high voltage lines to the end users all over the state. Their job was very important in that they were responsible twenty-four hours a day, every day, for regulating the current according to demand, which fluctuated during the day, but was usually more regular at night when

only factories and mills were running. The job was dangerous and required the operator to constantly check the gauges, monitor the hum of the equipment for changes, and to quickly adjust by cranking a lever or turning a dial.

Permanent operators were highly educated, skilled engineers who carried a huge responsibility in a potentially dangerous job. Today the APC operates all its plants by computer in the Birmingham offices, but the technology of the 1920s was still very young. The machinery on view at APC headquarters in Birmingham (Figure 3.6), is a little unnerving to contemplate since the **s**afety slogan on the green one reads, "When in Doubt, RUN!"

Figure 3.6 Pedestal control switches, 1926 and c. 1923. Photos by Author.

3.1.2 Family Houses

Did the operators choose their homes and modify them, or did the company make the upgrades/modifications and then assign the homes? Were the different styles the

result of a directive from management, or was it left up to the individual draftsman? The archives do not say.

The permanent operator's house photographed in August of 1914 (Figure 3.7) hints of Greek Revival and vernacular styles combined. It was raised on brick pilings that leveled the floors above the sloping ground. Visible are two chimneys on outer walls, a central doorway, and deep overhanging eaves, a vernacular stylistic trend popular in the South that helped keep the hot summer sun from heating the interior so much. The roof was a four-sided hipped roof with a front gable or pediment over the porch, which had a separate shed roof of very low pitch, almost flat. The pedimented front gable suggests an upgrade, perhaps done when the house was modified from a typical construction worker's house. The front chimney was for heating the house in winter and the smaller chimney in the rear was for the kitchen stove. There was no provision for electric lighting or cooking in this still early era for the APC camps. (At least there is no visible source of electric power coming into this house.) No formal landscaping was present, but tall sturdy shade trees were retained nearby to provide shade for the house.

The apparent reflection of a low sun angle in the windows of the right side in the photo would indicate the house faces a north or northeast direction, but without a plat showing the layout of the streets and houses, one cannot place the house in any particular point on a map. As noted above, the camp was not laid out in any formal scheme because the lay of the land did not lend itself to a formal plan other than that the houses were placed on the ridges to make rainwater and sewer drainage more effective.

Figure 3.2 Permanent operator's house, Lay Dam, 8-28-1914.


Figure 3.8 Permanent operator's house, Lay Dam, no date.

Another permanent operator's house (Figure 3.8), was clearly Arts and Crafts or Craftsman influenced with its casement or awning windows and segmentally arched frames. Wide eaves overhung to provide shade, and roof rafters projected under the gables at the ends. Some houses in the permanent operator's camp boasted hollow tile construction for the walls with painted stucco coatings and large windows on all sides. The hollow tile construction technique was something the APC experimented with at several camps when there was a bigger budget such as there was for permanent homes for the dam operators.

The permanent operators had their families with them, and their leisure time might have been spent with family in relaxation under the shade of a large tree or perhaps tending a well-kept garden such as the one seen in the image below (Figure 3.9). Screened doors and windows allowed the breeze to blow through the house and kept flies outside.

Employees and their families also enjoyed leisure activities such as hunting, fishing, and walking along the lake on trails provided by the APC or playing on one of many Company's baseball teams in an APC camp league. The permanent operators lived in houses as nice as any of those of similarly skilled workers in Birmingham or Montgomery.


Figure 3.9 Permanent Operator's House, Lay Dam, no date.

The evidence for these houses' dates of construction is found in another photo of a similar house under construction, dated November 1916 (Figure 3.10). The APC took over the camp from McArthur Brothers when the construction was completed on time, December 31, 1913.[198] The (probably) finished house, dated May 7, 1917 (Figure 3.11), does not have the segmentally arched windows, but it sat high on the bluff overlooking the lake. Large opposing windows provided ventilation and deep overhangs help keep the house cool in summer. A soldier course of bricks laid around the house decoratively marks the interior floor level and gives a nice separation between ventilated crawl space and the living space. The front porch entry had openings of the same proportions as the glazed windows and made a smooth transition from the concrete sidewalk that connected

[198] Atkins, 43.

both the front and rear of the house with the graveled cul-de-sac. In this view, the landscaping has matured enough to frame the house attractively, and a center planting bed for the cul-de-sac provides a focal point for viewing from inside the house.

Figure 3.3 Permanent operator's house under construction, 11-25-1916.

Figure 3.4 Permanent Operator's House, Lay Dam, 5-7-1919.

These remaining house images indicate that there was no one "style" associated with the permanent houses at Lay Dam camp. However, at the following camps, the APC began to identify each camp as a slightly different iteration of the company town by imposing certain stylistic choices, different in each camp. We will see that the hospitals were given different exterior features, even when the floor plans were identical. The same was true for the houses in the camps; even though there were many similarities in placement and size, the exterior materials and trim differentiated the camps. It also provided opportunities for self-expression, particularly in the upper echelon of the

construction workers. By the time Jordan Dam's camp was established in 1926, the company offered a "Build-It-Yourself-Camp" option for construction workers to erect their own homes with company-supplied lumber and other materials.

2.2 Warrior Steam Plant/ Gorgas Steam Plant: 1916 to 1917

At Gorgas Steam Plant, houses were taken over from the former owners of the coal mining business that had been purchased by the APC. The small coal mining operation was chosen for its supply of coal on the site and its proximity to the river. The coal would fire the boilers, and the river would supply the water to make the steam that turned the turbines, producing electricity to be run through the power lines for marketing to consumers. Construction of the bank of steam generating units would require a substantial investment in a company town that was destined to become a more permanent camp because of the nature of steam power plants: as one unit came online, another could then be added until the whole compliment was completed. For the APC this was a smart business move. They would not have to invest in new units until the demand grew to require another.

Construction began in 1916 with the men living in tents (Figure 3.12) while they began construction on wooden houses and other necessary structures, including permanent operator's houses, because the first plant was expected to go into production quickly. According to Royce Northcutt, there were four distinct divisions of the camp. These were a camp for Black employees, a group of houses called Pea Ridge, and another area called Front Row that consisted of houses along both sides of the main road. The fourth part of the camp he described as a "triangle made by a line through the bottom of Front Row, the river, and the creek." This was the area where the first group of

permanent operator's houses were begun in 1916 and then suspended. Northcutt also states that the bachelor's quarters for single men and early arrivals who did not yet bring their families, temporary single-family homes, and permanent single-family homes for the supervisors and other staff employees with families were all built right away.[199]

Figure 3.12 The Tent camp at Gorgas, undated photo. Notice the cemetery in the center right of the image. 2-7-1917.

Northcutt attempted to unravel the tangled exchanges of property involved in the purchase of this land by first the Winona Coal Company and then the APC. He found that some homes had been erected at Winona and were almost complete in a photo dated

[199] Royce Dean Northcutt, Sr., *I Remember Gorgas* (Self Published, 2000), 23.

September 7, 1916, but that work on them had stopped until 1918 either because of the sale of the land or because of the war in Europe had made materials and labor too expensive. A photo of Front Row dated September 11, 1918 (Figure 3.13) shows the houses completed and occupied.[200] The photo in the archives suggests that Northcutt's designation of these houses as permanent houses was incorrect because the image is labeled "temporary houses above the mess hall." However, the truth is probably somewhere in between. The intent might have been to replace these houses, but circumstances might have changed. Northcutt lived in the first house on the right and stayed in the camp until he was married in 1952m[201] so this assertion seems factual.

[200] Northcutt, 20, 21.

[201] Northcutt, v.

Figure 3.12 Front Row looking west from the company store. 9-11-1918.

3.2.1 Bunkhouses

The foremen's quarters (Figure 3.14) was equipped with five bedrooms with a large screened porch in front and a smaller screened porch in back. Like the other structures at Gorgas, it was raised above the ground on pilings for cooler summer ventilation and protection from termites. Two toilets, two shower heads in one stall, and one lavatory were provided for the men who lived in the Foreman's quarters. One electric light is indicated in the center of each room and three each in the front porch and the central hallway.

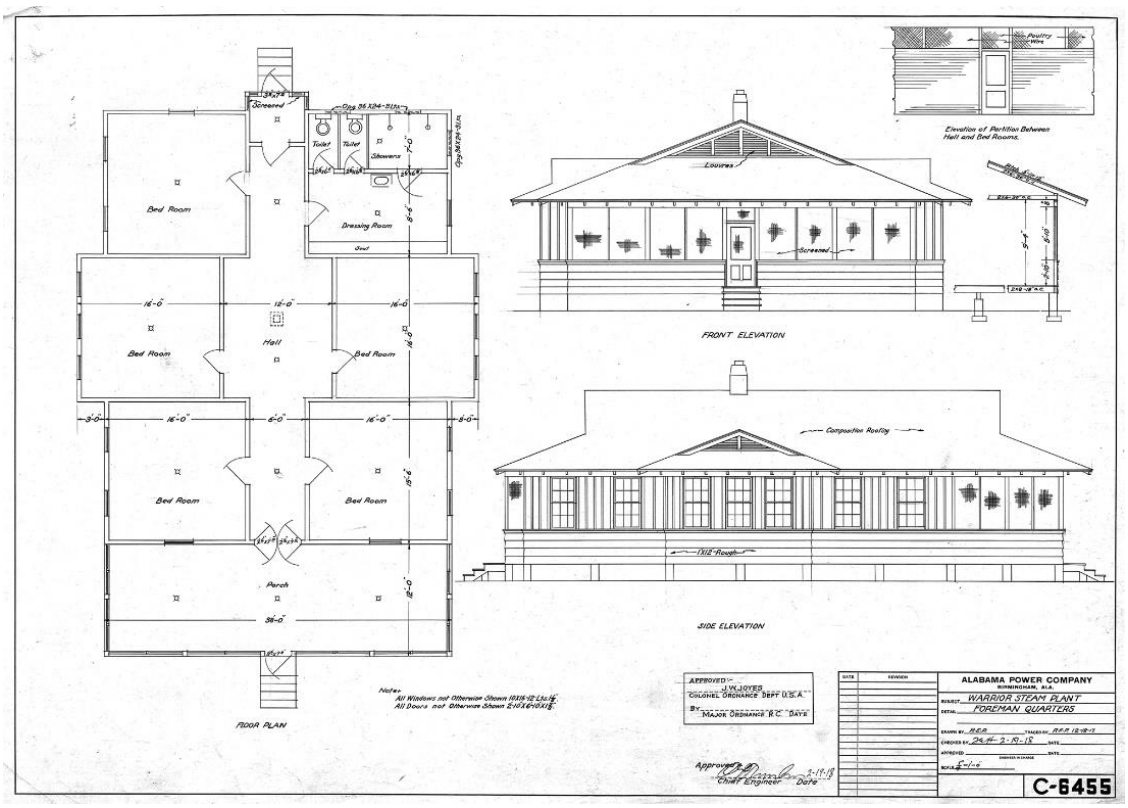


Figure 3.14 Foremen's quarters, Gorgas Camp 2-19-18.

A plan dated February 19, 1918 (Figure 3.15) for a bunkhouse for men who were unmarried and did not have sufficient rank to live in the foremen's quarters seems adequate (if minimally appealing) for the workmen. It housed sixteen men in private rooms at 7'-6" x 10' 6" large enough only for a bed that was pushed up against one wall. The beds seem generously sized in this drawing. Each room had an electric light fixture in the ceiling, typically a bare bulb. The construction is to minimal standards as the bunkhouse was not expected to be needed for very long. As in all the houses that had gable roofs, the ceilings were open to the rafters and the gable ends had louvered vents under the eaves. Windows were located opposite each other, which should have provided some cross-ventilation if the bedroom doors were left open, and the four corner rooms each had two windows. A single dressing room with a bench and two showers in the same stall served the men, who had no other amenities than a front and back screened porch and a large common living room of 18'0" x 26'0" that had the only heat source; a small space heater appears to be indicated next to one of the centrally located columns in the living room.

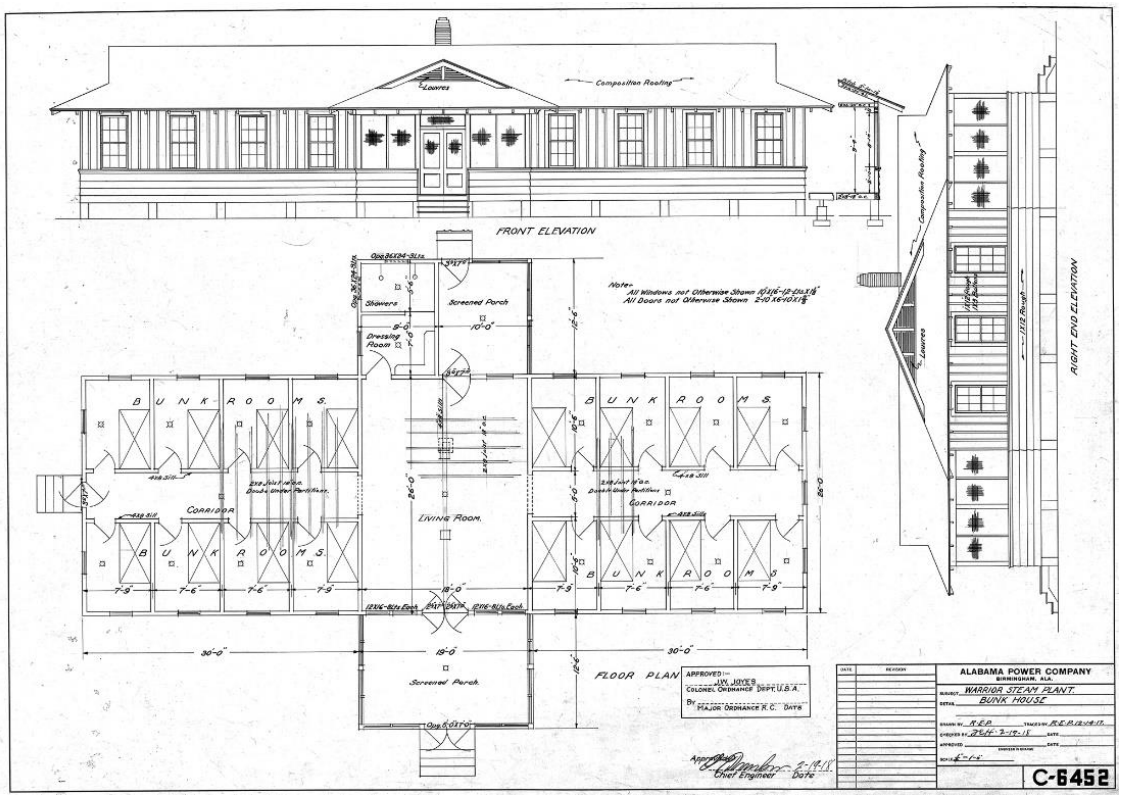


Figure 3.5 Bunkhouse, Gorgas Camp 2-19-1918.

A photograph taken June 15, 1916 (Figure 3.16), is identified as a bunkhouse. However, there are major differences in the plan and the exterior walls apparent in the photo. Two entry doors open above small stoops with stairs, and it looks as if another doorway is being added at the time of the photo. There is no louvered vent in the gable end, and the wall below the gable has one long continuous extendable flap of wall that opens out to form a shade for the probably continuous row of windows. This arrangement would be very good for circulation air within the space, but there are no apparent windows on the long side of the façade. It is likely that this arrangement, while cozy in wintertime, proved to be insufficient for cooling during the hot and humid summers, and that is why new drawings were made in 1918 for replacement structures.

Figure 3.16 Bunkhouse, Gorgas Camp, 6-15-1916.

3.2.2 Family Houses

By 1927 there were twenty permanent cottages: ten of them with five rooms and ten with four rooms. Eighteen three-room houses were also constructed, along with ten bunkhouses, and a "Build-It-Yourself" Camp had been begun for those who wished to build their own homes. However, most of these were moved or demolished by the end of the construction phases. There were two bathhouses, one each for Blacks and Whites, also dismantled at the end of the construction phase.[202] There was no longer a need to

[202] A guest house still stood by the 1930s as noted on the hand-drawn map of Gorgas in the 1930s drawn from memory by J. B. Murphy in September of 2012. Murphy had grown up in the camp. The map was drawn for an exhibit of life in the camps, organized and presented by the APC Department of Archives in 2012.

build foreigner's camps with the APC having formed their own in-house construction company, the Dixie Construction Company, after the completion of Lay Dam. There was a separate Black camp, placed across Baker's Creek from the White camp, near the construction site, and below the White camp that was on a ridge. In the Black camp were twelve bunkhouses, forty-eight board and batten single-family (two-room) houses, and over 120 single room houses. All the Black housing was torn down at the end of the construction period.

At least this is according to the Construction Reports of the Dixie Construction Company. The camp was fluidly expanding and contracting over time; houses were remodeled and sometimes were used for other purposes as the needs arose. A plat dated March 9, 1918 (Figure 3.17), shows the progress to date. As of this date, the Black workers are housed in a jumble of houses (shown in pink) across from the orderly tent camp (shown in blue) for temporary White construction workers. A total of thirty "semi-permanent" houses ran along both sides of the main road, but there are only nine permanent operator's cottages, which indicated that the steam plant was not yet operating at full capacity.

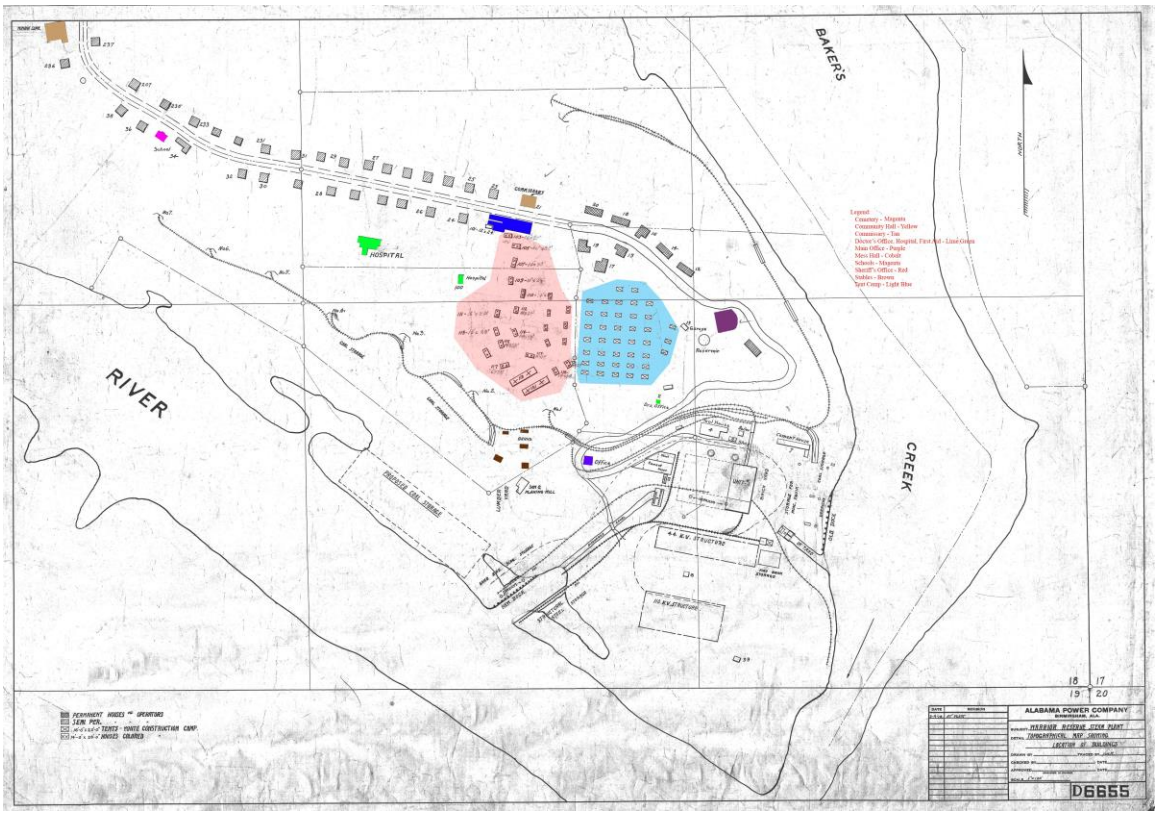


Figure 3.17 The plat of Gorgas in March 1918 shows the tent camp in blue and the "colored housing" in pink. Permanent housing is cross hatched (just above the tents) and semi-permanent housing is hatched (running along the road to the plant, higher on the left.)

A plat of the camp dated June 30, 1917, is zoomed in, and the image is turned slightly to fit on the page better (Figure 3.18). It shows a few houses in the White quarters along the main road, but no tent camp and no Black houses, so many houses were added in the space of nine months.

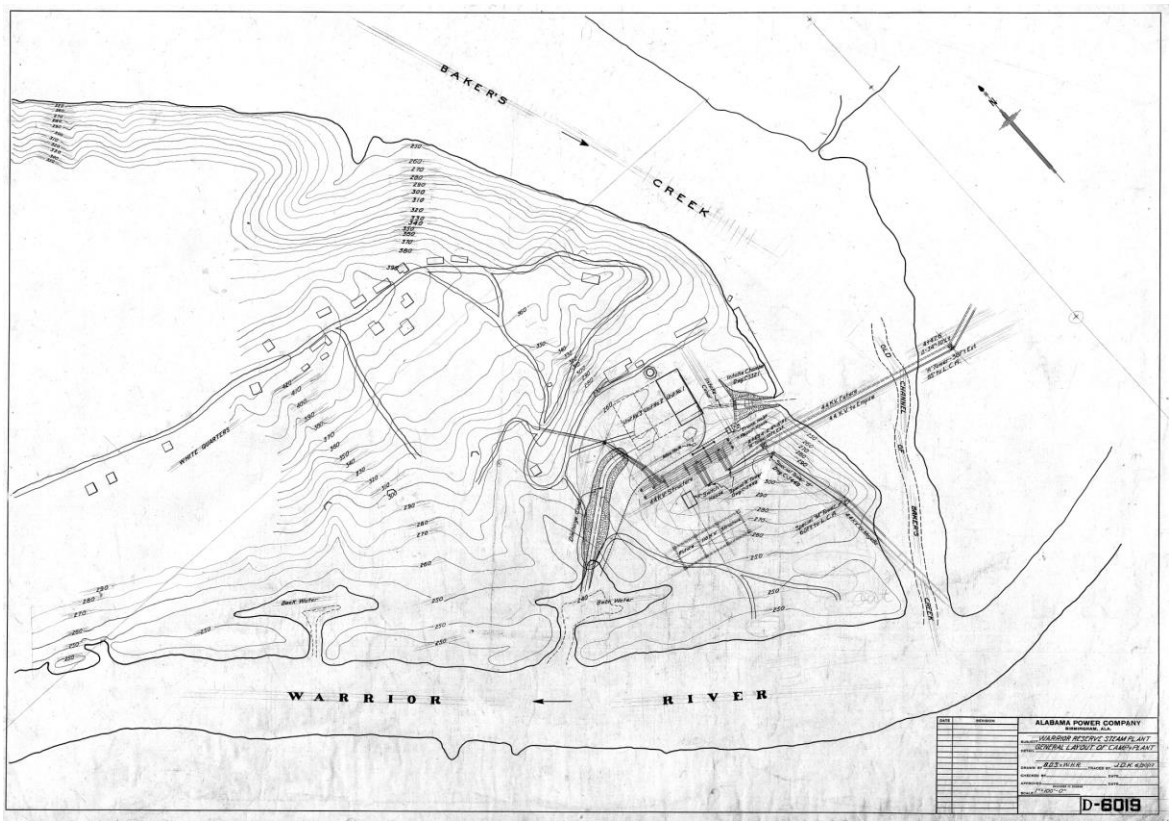


Figure 3.18 Gorgas plat dated 6-30-1917.

Again, if we look at Northcutt's hand-drawn map from the 1930s (Figure 3.19), we see changes. The cemetery is shown in magenta on the 1918 map (Figure 3.17), and on Northcutt's map is shown as a circular feature with a driveway around it to the middle right of the map (shown in pink.) The flattened side is now regularized into a perfect circle, which may mean it was also planted and beautified for the enjoyment of the living residents.

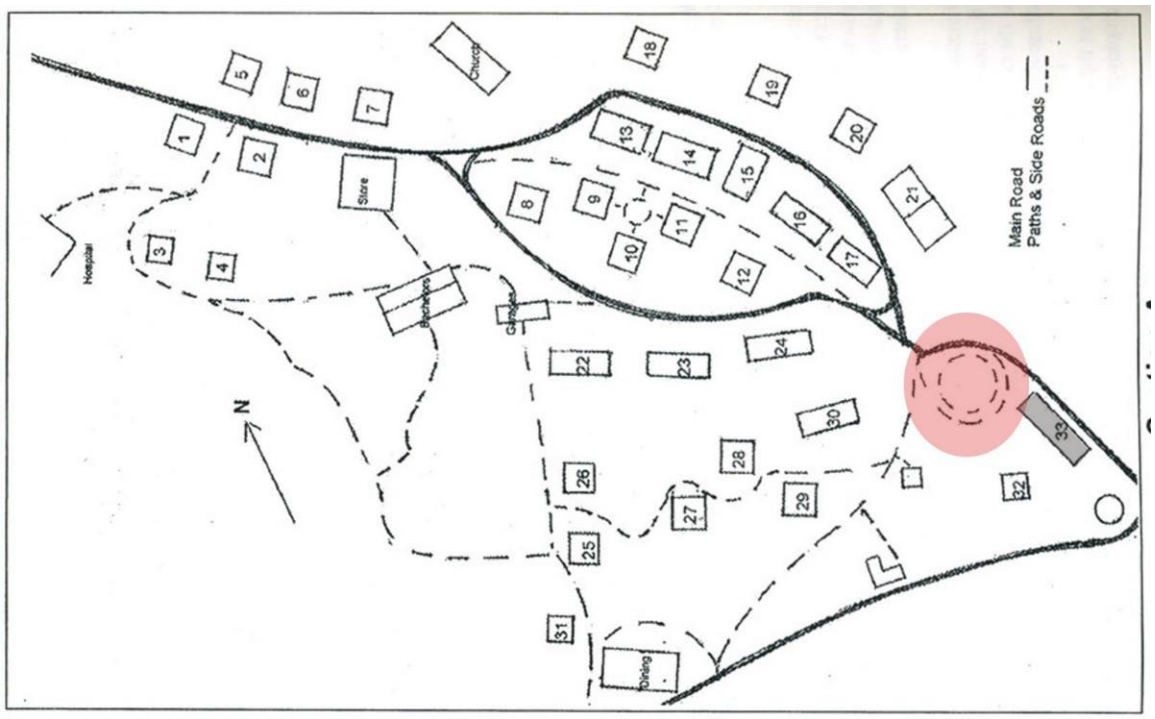


Figure 3.6 Northcutt's map, drawn for publication in 1999, modified by author.

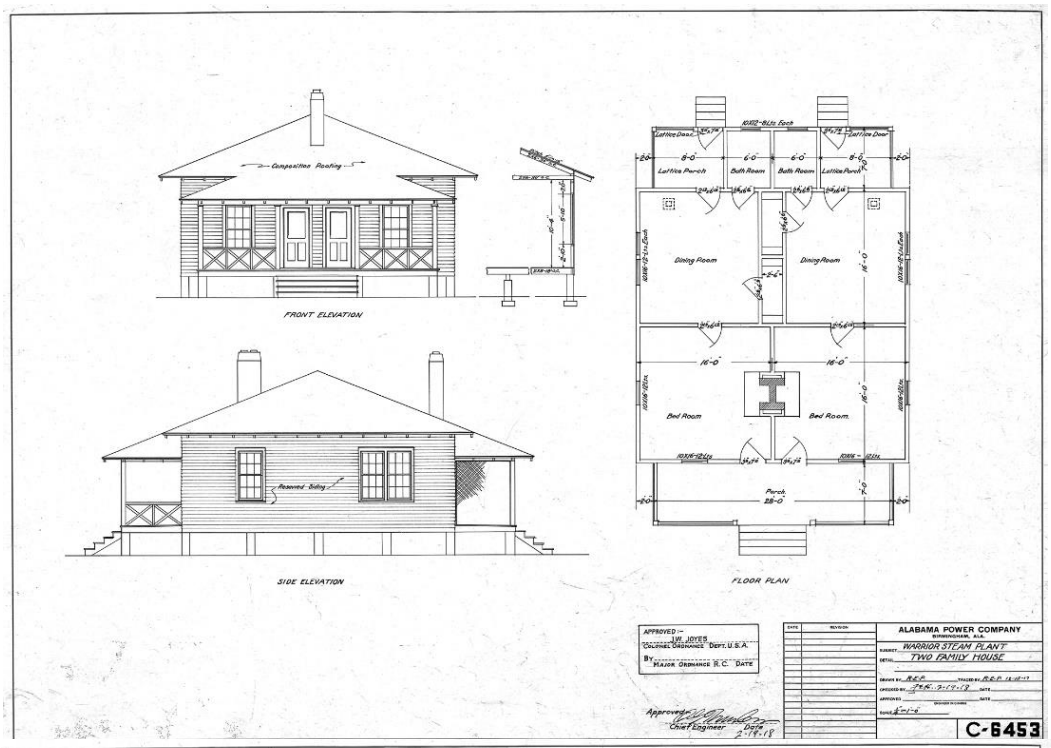
Northcutt also showed the footpaths and lesser roads or driveways with dashed lines. Houses 9, 10, and 11 on his map are shown with a circular drive or cul-de-sac. The same houses are shown as 15, 17, and 19 on the 1918 map and on the 1917 map (Figure 3.18), without numbers. Another house shown on all three maps is identified by Northcutt as the home of C.O. Lineberry, the plant superintendent, who first began working at Gorgas as the Chief Engineer at age 29 in 1919. This house is shown to the right of the cemetery as a gray rectangle (Figure 3.179) Promoted to Superintendent in May of 1920, Lineberry worked at Gorgas until his death in 1948.[203] Lineberry's job required him to be available at any time, so his house was placed closest to the work just past the cemetery.

[203] Northcutt, 5.

According to Royce Northcutt, the housing for Black workers was in three locations at different times. The first was to the west of the camp, downriver along two dirt roads that ran southward toward the river on two minor ridges, another one near Short Camp, also to the west, and one off the East Ridge (but still to the west of the main camp).[204]

For men with families, several options were available. Plans for a duplex arrangement included one bedroom with a fireplace in the front of the house and a dining room with a closet and the bathroom opening off it in the rear (Figures 3.20 and 3.21). A long front porch ran across the front and a lattice-screened rear porch opening off the rear dining room was one form while the other had somewhat shortened front and rear porches with a pyramidal hipped roof, but the floor plans and shiplap siding were the same. Employees were expected to take their meals in the mess hall, but families had to make do. There seems to be no provision for a kitchen beyond a small heater stove in one corner of the dining room. Meal prep would have taken place on the employee's own tables, on the rear porch, and perhaps in the bathroom where there may have been running water, as families were not fed in the company mess halls. There is a single closet in the house, located in the dining room, approximately eight feet long and two and a half feet wide that may be a pantry. (The plans do not show any detail for plumbing.)

[204] Northcutt, 26.



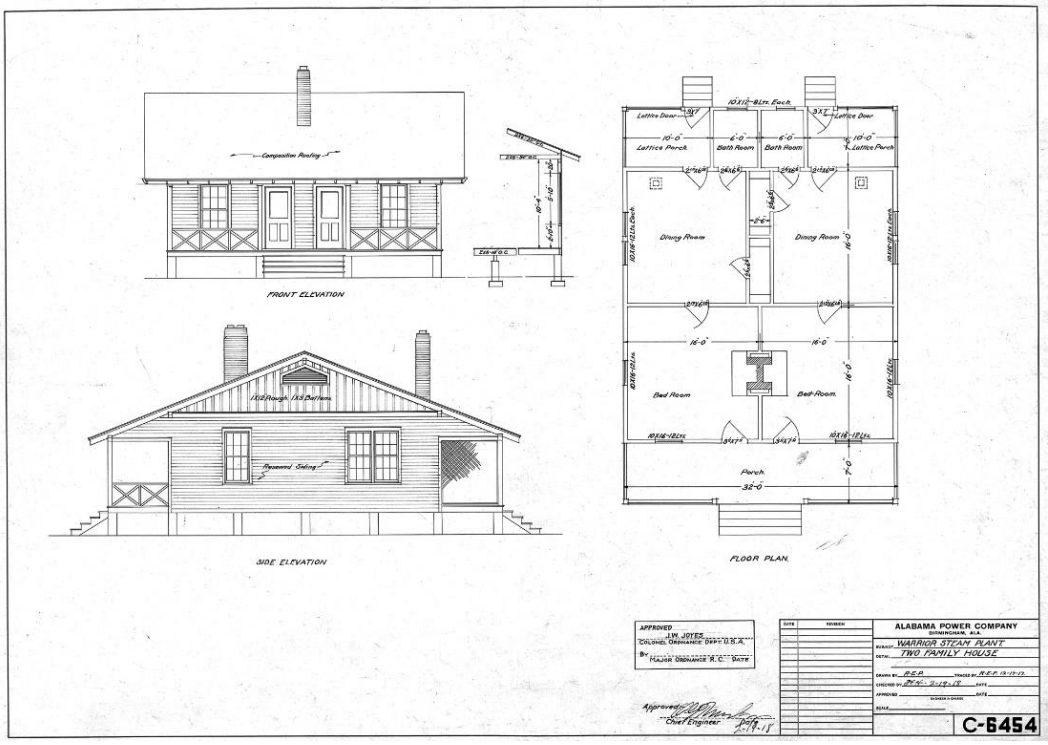


Figure 3.7 and Figure 3.8 Two-family houses, Gorgas Camp, with alternate roof styles, both dated 2-19-18.

A photograph that shows two duplex houses in the short-porch style also shows utility poles fashioned from pruned trees running along the street in front of the houses (Figure 3.22). There is no apparent electrical service to the houses. Clearly, construction is on-going at this time, but chairs await visitors on the nearest porch, and someone can be just made out sitting on the porch of the second house, chatting with a comrade. A third house is glimpsed in the distance.

Figure 3.9 Temporary Duplex Houses, Gorgas Camp, 9-7-1916.

Although the bunkhouses and other temporary structures were often left unpainted, houses of the permanent workers were painted in light colors to set them off from the surrounding forests. The designers may have been aware of Alexander

Downing's publications and his preference for light colors (not White) as a way to blend the homes with the landscape. The lighter colors also appear cooler in Alabama's humid heat, and a mere suggestion of more comfort can produce a physical sensation of relief. No doubt the designers were also aware of the usefulness of the Arts and Crafts- or Craftsman-inflected vernacular styles of rural Alabama. Simple wood-frame houses with sufficient windows for light and air circulation, raised up above the termite-infested damp ground, and the light colors that were thought to keep both bugs and "haints"[205] away had historically all proven themselves as the strongest candidates for the construction camps.

For a man with higher pay, the three-room house included a living room, dining room and bedroom, with two screened porches, two fireplaces, and board and batten siding detailing above shiplap siding (Figure 3.23). The dining room did not have heat as it was assumed a cook stove would warm the space. The roof is a pyramidal hipped roof. No electrical wiring is indicated, and the supposition of the draftsman seems to be that the tenant would furnish the house according to his wishes.

The APC offered electric stoves and other appliances to its worker families, to be paid off by paycheck deductions. This was one effort by the company to offer amenities to families that may have been available in towns but were not in rural areas. More information on the use of appliances by the employees of the APC camps will be discussed later in Chapter 7 in the discussion on public relations.

[205] Blue was traditionally used to frighten evil spirits from entering across thresholds or through windows in African cultures. This belief transferred to both Whites and Blacks who worried about these dangerous invaders or "haints" as they are still often called in the South. This is not the same as painting a porch ceiling blue – that is done to keep birds from nesting on the porch. Whitewashed tree trunks are thought to look tidy and to keep insect pests out of the trees.

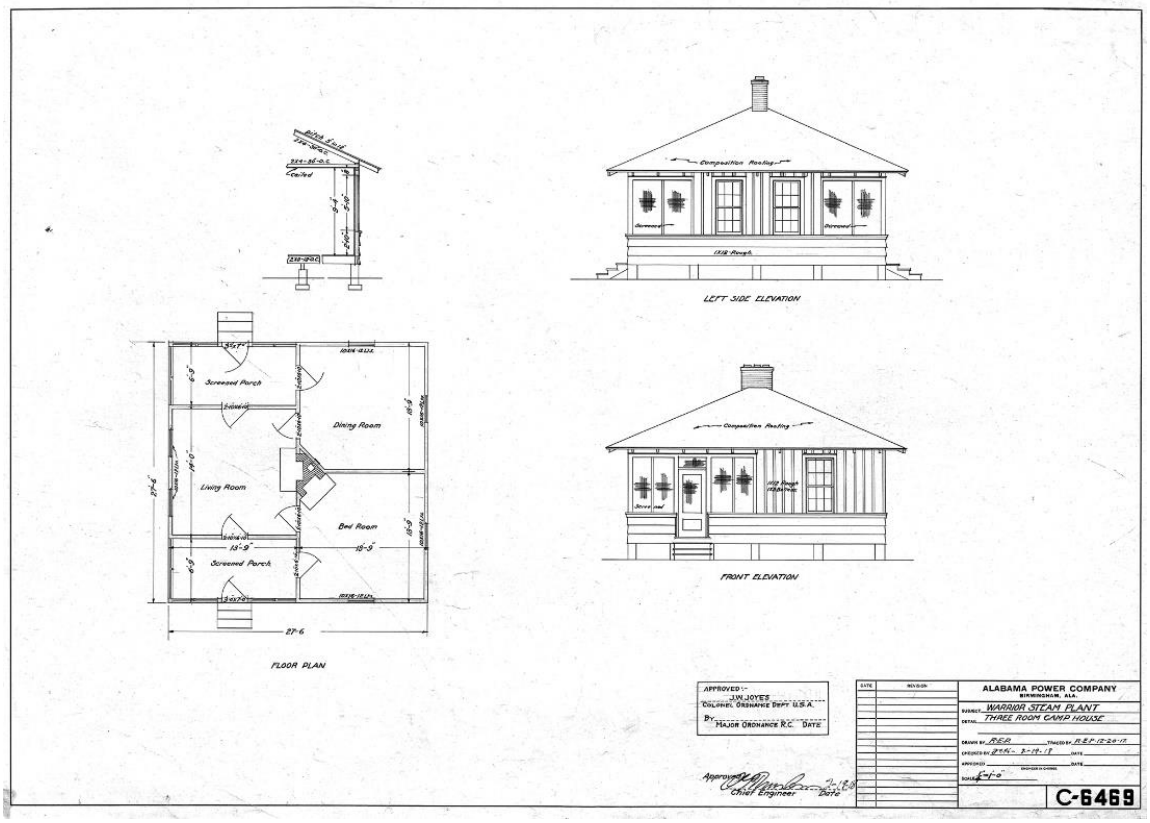


Figure 3.10 Three-room house, Gorgas Camp 7-19-1918.

Similar house designs were published in the trade journals of the coal mining industries (Figure 3.24). For instance, an article discussing improvements in coal mining machinery included the plans and elevations of a typical employee house at the mine town at Divernon, IL.[206] It is similar to the APC houses designs in plan, but more elaborately detailed on the exterior and is provided with a room labeled "kitchen." A front porch provided a view onto the street and interaction with neighbors. A rear porch

[206] Anonymous, "Model Safety-First Coal Mine in Central Illinois," *Coal Age*, July 6, 1918, 4. Internet accessed July 20, 2019. https://books.google.com/books?id=Otw-AQAAMAAJ&pg=PA130&lpg=PA130&dq=George+H.+Miller+town+planner&source=bl&ots=2YlY_1ptjt&sig=ACfU3U0B-pgWYKX5TqbUgoV0rNvXsQIfnA&hl=en&sa=X&ved=2ahUKEwjQwZael8TjAhXaB80KHexEDH0Q6AEwDHoECAcQAQ#v=onepage&q=George%20H.%20Miller%20town%20planner&f=true.

was used as a summer kitchen or for access to the back yard and garden. One central chimney heated all four rooms in a climate with much colder winters than those in Alabama. Houses were built of four different designs but similar floor plans along the main road of the town, planted with trees along the road, and with White picket fences separating them. Along these fences were placed water hydrants shared by two houses. Except for the climate, the houses were intended for similar classes of workers in similar towns and were typical in size and construction across the country.

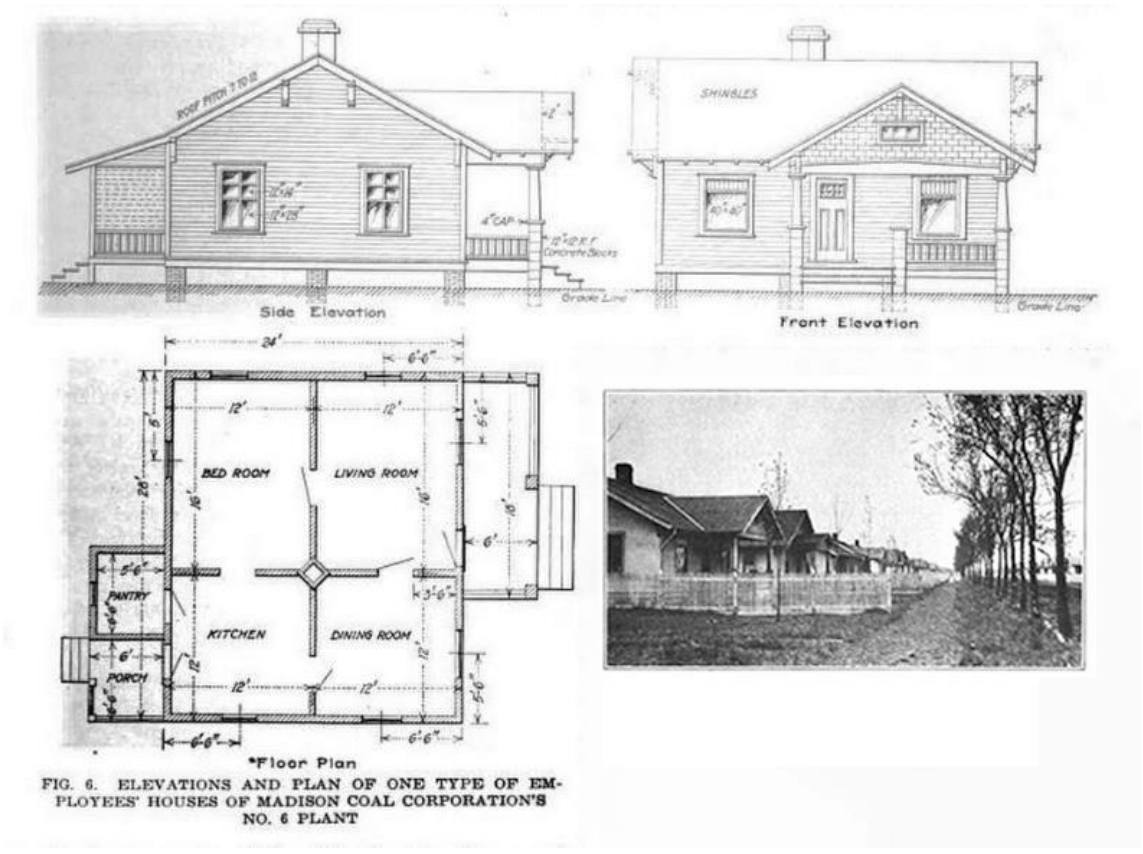


Figure 3.11 Employee Housing at Divernon, IL for the Madison Coal Corporation 1918.

In fact, an interesting detail is found on the Gorgas camp drawings that may signify that the APC engineers did not design the Gorgas houses, rather they purchased or borrowed plans from the military. On each drawing, the approval block inserted just to

the left of the APC title/approvals block refers to Colonel, Ordnance Department and Major Ordnance Department as signatories to be validated for construction. There is one name for the Colonel, J.W. Joyes, but no signature is present (Figure 3.25). Below that, the drawing is signed off as approved by the Chief Engineer, whose name is not decipherable from the signature. Because the Gorgas plant was temporarily under the control of the US Government during World War I the extra approvals may have been required for government funding to be approved.

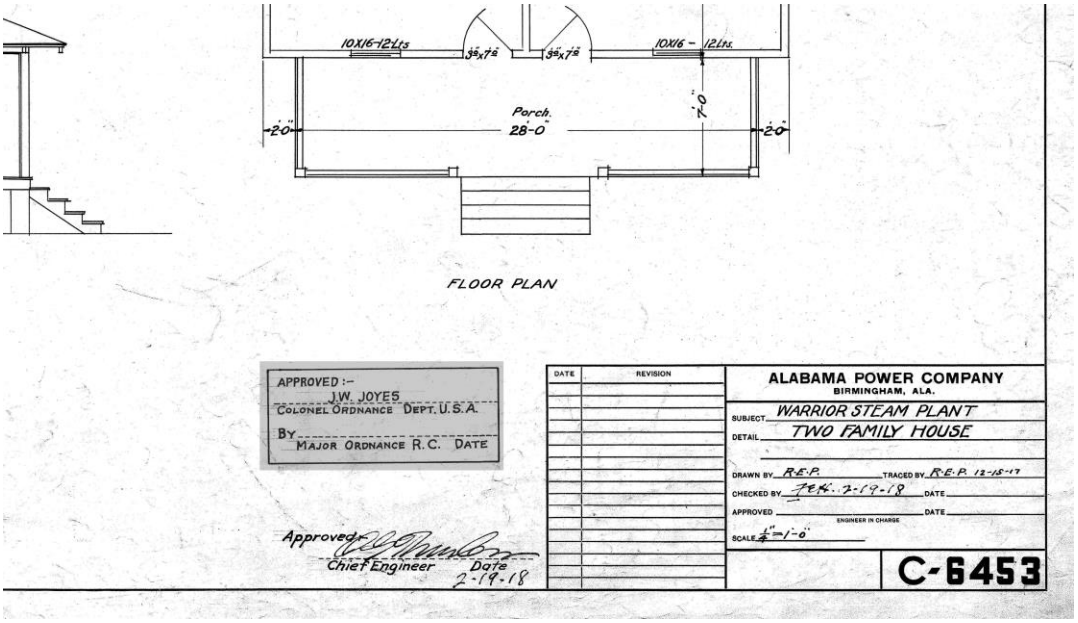


Figure 3.12 Approval Block with Military Titles shown in gray, modified by author for clarity. 2-19- 1919.

Clearly, the families were not prioritized highly enough to receive electric lights in the employee houses though they did have coal in abundance for heating. The foremen and bachelors' quarters were provided with adequate (by the standards of the time) lighting, but by today's standards, the life must have been very Spartan. Northcutt states in his memoir that "a number of the early workers came from Chilton County where they

had worked for Dixie Construction Company in building lay Dam,"[207] so they may have thought the accommodations were just fine. They did not have to pay for the water, sewage disposal, or coal for heating, so living without lights was probably not considered a hardship. The APC did not want to waste expense on employee housing that was so temporary, but the larger bunkhouses and foremen's quarters were probably better lodging than young men of Alabama could expect in a rural setting even in 1920. After the stock market crashed in 1929, the permanent employees were able to live in their houses and receive full pay during the winter months when there was little work other than keeping the plants in standby condition for the time when the demand for electricity would be sufficient to run the generators again.[208]

Photographed on the same date as the temporary duplex houses are some permanent operator's houses that were at that point under construction. They were built with hollow clay tiles and were as high in quality as any house of comparable value in larger cities such as Birmingham and Montgomery, but some operator's cottages were stick-built, as evidenced in the photographs from January 1928 where the road is deeply rutted and sewer lines are being installed in the camp (Figures 3.26 and 3.27).

[207] Northcutt, 8. Because the Dixie Construction Company was not formed until after the construction of Lay Dam was completed, Northcutt isn't quite correct in his statement, but the men probably did work on Lay Dam for McArthur Brothers.

[208] Northcutt, 10, 11.

Figure 3.13 Permanent Operator's houses under construction, Gorgas Camp, 9-7-1916.

The clay-tile houses were intended to serve for many years as homes for the permanent operators. These men would typically have families to support, so the rooms were generously sized, and over time better amenities would be provided such as electric lights and appliances. The camp at Gorgas was planned to be able to grow and shrink according to the demand for power (which waned in wintertime) but also because from time to time new power plants (generators) were added, an operation much less complicated than adding a generator inside a working dam. The coal-fired plants were stand-alone units that could be added to but adding anything inside a solid mass of

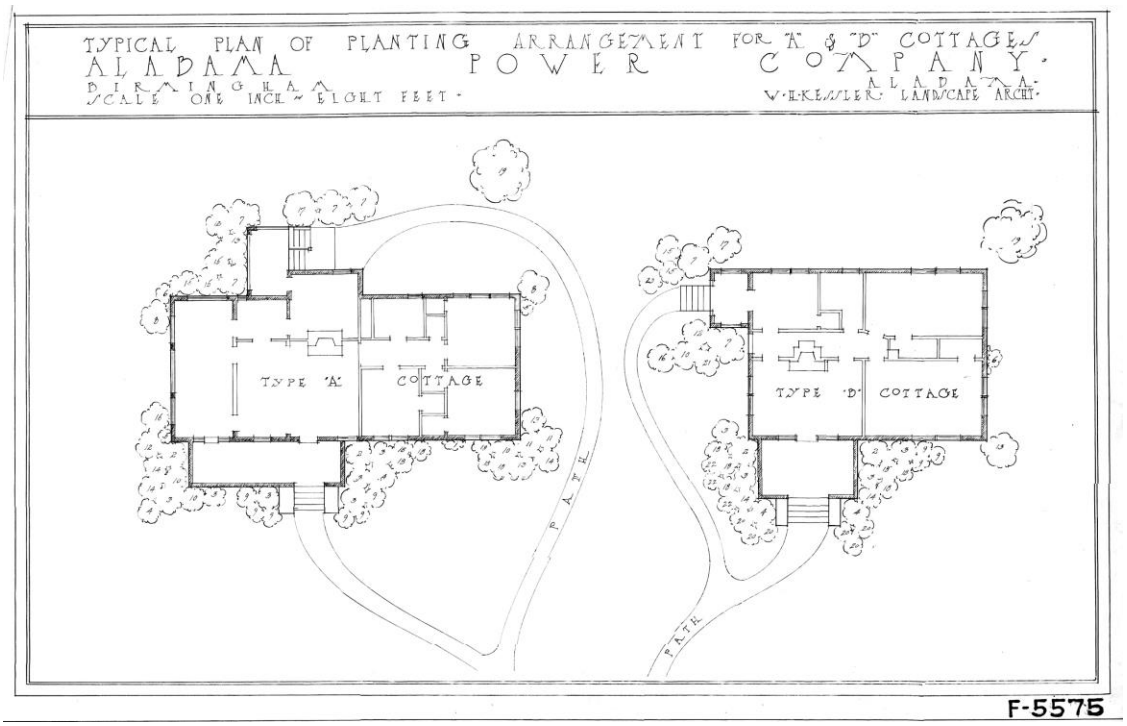
concrete was fraught with complexities and the possibility of numerous unknown problems.

Figure 3.14 The permanent houses seven weeks later, Gorgas Camp, 10-26-1916. Type A Cottage on the right.

The permanent operator's houses were given landscape designs by William H. Kessler,[209] seen on an undated drawing entered into the DCC numbering system as F-

[209] Birmingham Public Library identifies W.H. Kessler: "William H. Kessler was born in Nebraska in 1880. As a young man, he worked under P.J. Berkman of Fruitland Nursery in Augusta, Georgia. In the early 1900's Robert Jemison, Jr. contracted with Fruitland Nursery to prepare landscape designs for the Mountain Terrace section of Birmingham. Kessler traveled to Birmingham as a representative of the company to oversee the installation of the project and stayed after the project was complete to begin practicing as a landscape architect. Once referred to as the "L'Enfant of Birmingham," Kessler planned and developed some of Birmingham's finest residential neighborhoods including Redmont, Forest Park, Mountain Brook, and Central Park. He designed the grounds for some of the finest

5575 (Figure 3.28). A new feature shown in the floor plans is the implementation of a hallway to connect the bedrooms with the rest of the houses. A hallway serves as circulation space but gives privacy to the rooms it serves. However, it is not really useful for any other purpose. Hallways were edited out of all of the temporary house types because they were more expensive than useful, but if the permanent operator's houses were more like houses in Birmingham, the operators were expected to be very satisfied though living so far from town. The elegant landscaping was certainly another attempt to alleviate the *ennui* of the remote camp.



homes in the developments of his colleague and friend Robert Jemison, Jr., and he developed a plan for Woodrow Wilson Park (now Linn Park), the grounds for many churches and public buildings, and the model city of Corey (now Fairfield).

The American Institute of Architects recognized Kessler's great achievements in planning and landscape architecture by electing him an honorary member of the organization." accessed June 30, 2019 2:17pm., https://www.bplonline.org/resources/archives/Architecture/Kessler.aspx

Figure 3.15 Cottage Types A and B landscaping plans by W.H. Kessler, undated.

By 1928 the photographic record suggests permanent operators were still occupying some of the wooden temporary houses, but that these were getting upgrades along with the permanent houses (Figure 3.29). A cast iron sewer line is being installed on

January 25, 1928, the same day the photographer captured an image of the shiplap wood-style permanent operator's houses without any landscaping installed to date (Figure 3.30).

Figure 3.16 Permanent operator's cottages, Gorgas Camp, #50-42, Gorgas Camp, 1-25-1928.

Figure 3.17 Operator's Cottages #4 – 12, with sewer line going in, Gorgas Camp 1-25-1928.

The permanent houses were very similar in style to the houses built for the permanent workers at Lay Dam. The houses are positioned along the main road on the ridge as seen in the panorama made in September 1918 (Figure 3.31). The houses appear to be occupied by the time the photo was taken. A small child stands in the front yard of the far-left house beside a water spigot, so water is available but perhaps not piped into the houses directly. In the panoramic image, the road has been scraped smooth and will one day have gravel and then macadam pavement added. The tree and small shrubs in front of the closest house have been added, but weeds have begun to grow in the planting

bed. The three boxwoods at the corner of the next house look better tended, but there has been a heavy rain that has washed the steep transition between the houses into ruts.

Figure 3.18 On September 11, 1918, a company photographer shot a fold out panorama of the permanent operator's camp at Gorgas. Note the landscaping is being installed and that the far-left house has a water pump in the front yard.

This is still unmistakably a construction site in September. Another view (taken in November of 1925), this time looking down the hill toward the cemetery, shows the hazy hills in the distance across the slough where the Black camp was situated (Figure 3.32).

Figure 3.19 View toward the east towards the cemetery. Gorgas, 11-3-1925.

Is the quality of the construction faulty or are the tenants rough on the houses? A close-up view of a front porch shows some disturbing details. The photo is undated, but the yard appears not to have been landscaped (Figure 3.33). The porch lights hang askew and the planks beneath the benches are beginning to come loose (Figure 3.34). A rough box (for a dog bed?) is attached behind the chair and propped with a crooked leg under the porch overhang and below the screened partly opened window. The brackets supporting the porch roof are quite handsome and the windowsills are brick. If the APC were a good landlord, was this tolerated? It seems so since most people in the camp enjoyed their dogs as pets, and some were used for hunting in the woods surrounding the

camps. The APC had a hunting club made up of both employees and management that was regularly written up in *Powergrams*.

Figure 3.20 Permanent house, Gorgas, completed 1-27-1917.

Figure 3.21 Close up of the front stoop, showing electric lights and benches for visiting with neighbors. No date.

The superintendent's house was large and handsome as can be seen in the photo taken in the rear of the house (Figure 3.35). A sitting area of Adirondack chairs complements the roofed porch on the left of the house, and the landscaping looks well-established, so this undated photograph must have been made later after the camp had become developed enough for grass to grow and be cut by the APC landscape crews. The house is elegant and imposing in style while in keeping with the egalitarian theme of the rest of the camp with its wide overhanging eaves, cedar shake siding (a fancier use of the materials than others), and six-over-six doubled windows. The shrubbery choices reflect the plants in use in rural Alabama at the time: privet, althea, cedar, forsythia, and

mimosa. Much of the plant material may have been dug up in the woods near the site.

Figure 3.22 Superintendent's House, Gorgas camp. Undated.

The superintendent's house had to be located nearest the worksite but with enough distance that he and his family could find some peace on a job and yet remain close to work. The road inclines steeply at this location and swings down and around the cemetery and the superintendents' house before it descends to the dam and offices of the managers. Here the superintendent can keep an eye on the employees even when he is off the clock. Benevolent patriarchal management, so popular in the first half of the twentieth century for worker housing and job supervision, still had its claws although they were not always obvious.

3.3 Duncan's Riffle/Mitchell Dam: 1921 to 1923

The camp at Duncan's Riffle (Mitchell Dam) was located on the west side of the river on high ground immediately above the dam. In the image, it is behind the photographer (Figure 3.36). It consisted of three parts: the White camp, the Black camp, and a camp for family residences. The White camp was closest to the dam and contained the administrative offices, commissary, warehouse, amusement house, bathhouse, ice plant and bakery, four bunkhouses for engineers, clerks and foremen, each housing sixteen men, and nine bunkhouses for labor, each housing twenty men. There were also several smaller buildings, and many of the laborers lived in tents. The camp included eleven tents, seven shops and warehouses, and three miscellaneous structures.[210]

[210] L.V. Branch, "Construction of Mitchell Dam," *Powergrams* (December 1923), 11-13.

Figure 3.23 Mitchell Dam from the Camp Side, Photo by Author 3-19-2012.

The family residence camp sat farther from the river and considerably higher above the White camp along a winding road (Figure 3.37). There were three double two-room houses (duplexes), thirteen three-room houses (fifteen planned), three four-room houses, and a schoolhouse. Three "semi-permanent" five-room houses were provided for the Resident Engineer, Superintendent of Construction, and Office Manager. Nine administration buildings, a fully equipped hospital building, and three-room houses for the resident surgeon and nurse completed this camp.[211] In the progress reports made to the APC president and Board of Directors for the period September 15 to October 1, 1923, it is noted that two permanent houses have been completed and occupied and that "brickwork on the original twelve houses" is two-thirds complete and the carpentry on these houses is half completed.[212]

[211] Branch.

[212] J. U. Benziger, *DCC Progress Report (*October 1923), 1. It is also noted that the "dangerous portion of the road entering the camp has been re-routed and surfaced." Benziger was the General Superintendent of the Coosa River Hydro Plants.

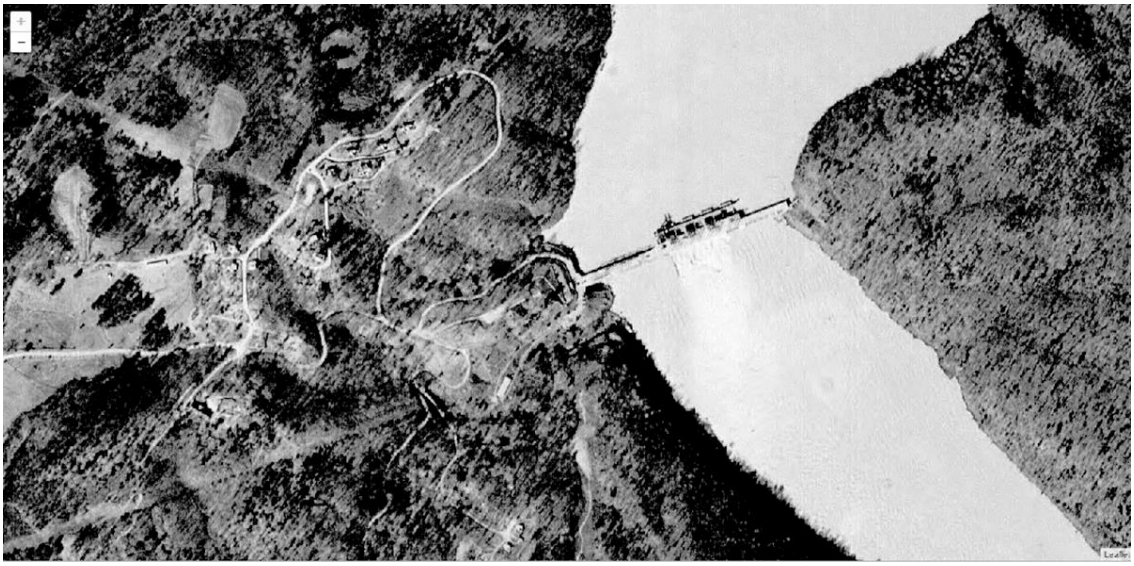


Figure 3.37 Mitchell Dam USGS Topo Map 1941.

The Black camp was located at a distance and on the opposite side of the hill from the White camps. Here there were five bunkhouses (six were planned), each housing twenty-four men, twenty double one-room family houses (duplexes), and about 170 one-room shacks that were planned (150 built) to accommodate one family or, if not a family, four single men. Also, in this camp were a mess hall, boarding house, bathhouse, thirteen tents, and an amusement house.[213] Unfortunately, there is no drawing for the camp at Mitchell Dam that could make the exact locations of each structure clear.

In total, these camps provided accommodations for 244 Whites in bunkhouses, twenty-one White families, and 354 Black laborers. Roads were built of gravel and solid rock with iron or wooden drains and culverts. Water was supplied through 9,271 linear feet of cast iron pipe and 1,097 linear feet of wooden stave pipe from seven tanks; 3274 linear feet of sewers were laid in vitrified terra cotta pipe. Fifty-five acres were cleared

[213] Branch.

and graded for the camps, and over twenty-nine miles of telephone line were installed to communicate with the main office in Birmingham and other APC sites. Nearly 18,500 miles of electrical wire was installed to service the camps and the rest of the state with the power that would be produced at Mitchell Dam. An approximately six-mile-long railroad spur was constructed to connect the dam site with the L&N Railroad line at Coopers, Alabama. Cost reductions resulted from using an old lumber roadbed for part of the distance and leasing the steel rails from the L&N. Two locomotives, three flatcars, and a boxcar were purchased for use on this line.[214] The production of electrical power was quickly becoming more complex and more efficient at the same time.

The lumber used in constructing the camps, cofferdams, derricks, and other structures at the construction site was not all provided by the lumbering operation. The lumber for the camp buildings was purchased from outside parties after the completion of the rail line making it possible to get better quality than the green lumber supplied for construction of the dam although some was purchased in nearby Verbena and hauled in on wagons before the rail line was finished.[215] Martin directed the employment office give preference "as far as possible" to men from Chilton and Coosa Counties, and the board of directors agreed during the same meeting that as much as possible the materials should be purchased from the Anniston Electric Steel Corporation "in view of the relation of that company to the Power Company" and to Anniston Mercantile Company, W.H.

[214] Branch.

[215] Branch.

Weatherly's Company at Talladega, and the Hobbie Grocery Company at Montgomery.[216]

At Mitchell Dam, about fourteen miles downriver from Lay Dam, everything was built from scratch as the site had no pre-existing structures to convert into new uses. In fact, the site was on one of the "wildest sections of the river" and "barely accessible" to the outside world.[217] Because everything had to be brought in on roads cleared and built through the forest by APC crews, the work took more time. The population at this camp village was about 2,000. The natural topography was divided by a series of narrow ridges that were effectively used to segregate the camp by social status even though it cost more to build that way. The ridge nearest the dam was used for the main White camp, offices, and service buildings; the higher ridge above this camp was reserved for "twenty- four comfortable cottages for white families" and the hospital. The Black camp was separated from the other camps and surrounded by a ten-foot wire fence to prevent trespassers from entering the camp to sell illegal liquor. Although the gates were never locked or guarded, this arrangement also served to "concentrate" the stream of workers passing to and from their jobs for ease of observation. The Black camp had its own mess hall, bathhouse, and two twenty-four-man bunkhouses. Twenty two-family houses (duplexes) and 120 shacks were erected for Black workers. There was always a waiting list for the shacks as they were preferred to the bunkhouses for the privacy afforded.

[216] Meeting of the Board of the APC, June 29, 1921, attendees were Mr. Martin, Mr. Walmsley, Mr. Thurlow, Mr. MacLetchie, and Mr. Hood. APC Archives, Birmingham, AL. Most of the lumber cut in the basin was used for cross ties for the railroad and cribbing for construction of the dam.

[217] Jackson, *Rivers of History*, 184.

Filtered water was provided in hydrants serving eight to twelve of the shacks.[218] The APC also provided building materials at cost to White employees who wished to build their own homes and provided connections for lights, water, and sanitary services free of charge. The portion of the camp that was to be used by permanent operators had sanitary sewers, but the rest of the camp had to use a dry closet can system, which was emptied and cleaned daily.[219]

3.3.1 Bunkhouses

People did use electric fans to move the hot sultry air about, but a sleeping porch offered the large screened openings that allowed for so much more air to blow across one's cot. Ventilation was the only way to stay cool in the summer's heat, so the APC designers paid attention to the placement of windows and doors in all structures.

Here are the two drawings that seem to indicate that at Mitchell the inequity of spaces at Lay and Gorgas was apparently recognized, and an alternative plan was proposed (Figures 3.38 and 3.39). Previously each man had been allowed his personal bedroom space; now there were two men to a room. Since the two men could work different shifts, each had the space to themselves for part of the day, and that space was much larger than that afforded previously. However, the rooms at the corners of the structure no longer have two windows as was the case at Gorgas. Was this merely a cost-saving design change or did the ventilation improve if the main corridor were the only way to draw fresh air through the rooms when doors were open? No notes or captions on the drawings suggest the reason for this omission although the change from twenty-one

[218] Branch.

[219] Branch, 13.

windows to ten in the halls and bedrooms would seem to indicate a desire for an economy of materials. This arrangement of the windows at Mitchell seems to be more related to concerns for arrangement of the beds than for ventilation of the rooms.

Another improvement in the bunkhouse plan can be noted. At Gorgas the bunkhouse did not have water closets although there were showers and a dressing room with a lavatory and bench seating (Figure 3.39). At Mitchell two toilets, two "shower baths," and two lavatories have been indicated and a water heater and tank were included to provide hot water as needed (Figure 3.38).

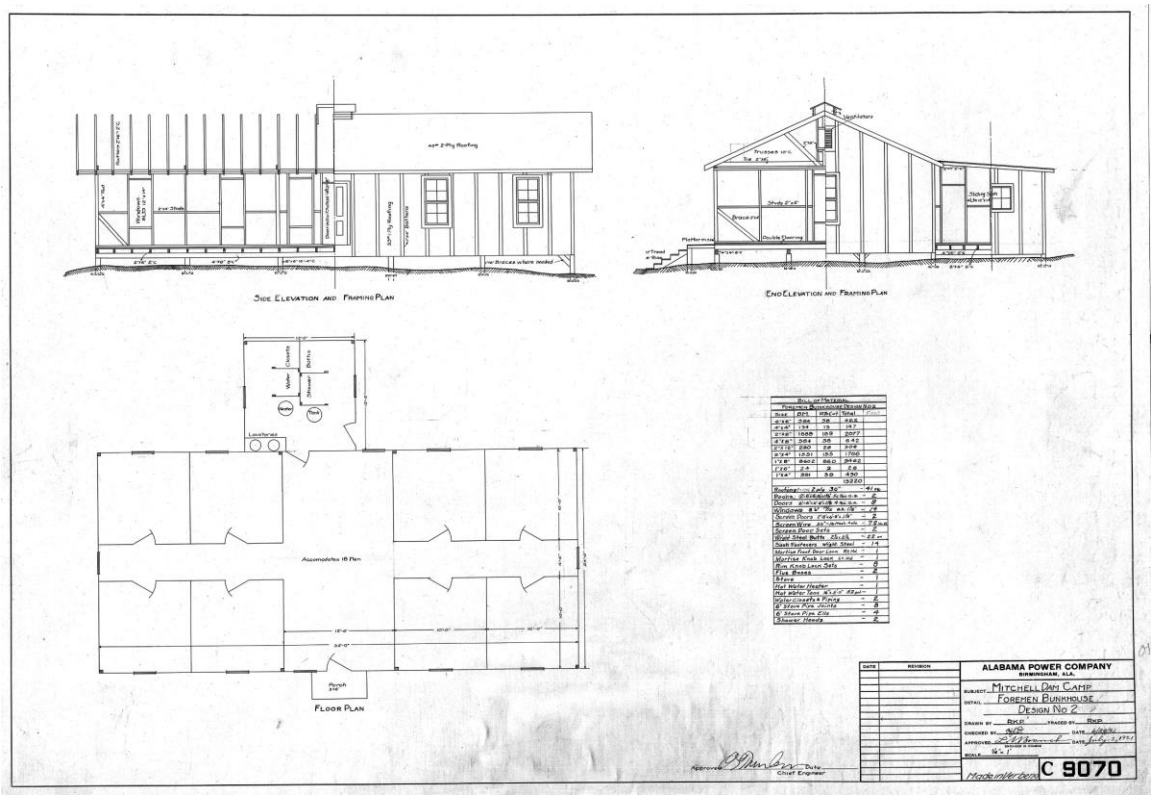


Figure 3.24 Foremen's Bunkhouse, Mitchell Dam, 7-2-1921.

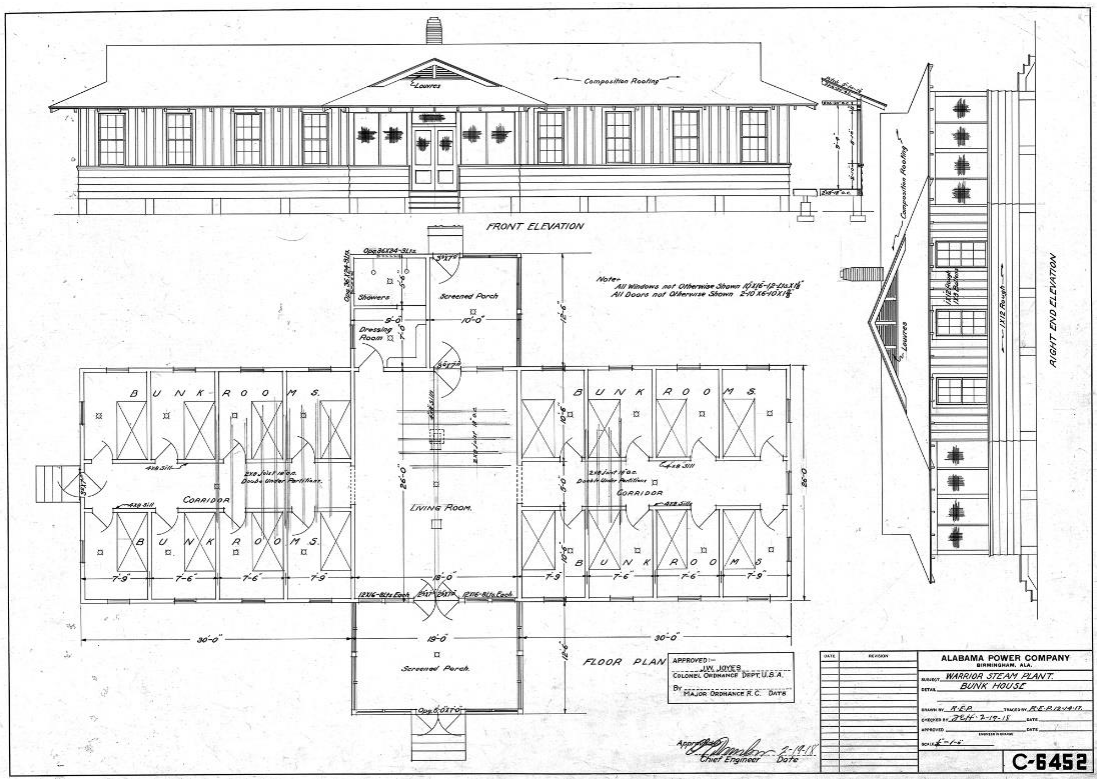


Figure 3.25 Bunkhouse, Gorgas Camp 2-19-1918.

But are we comparing apples to apples? The nomenclature changes from project to project, not unusual when new supervisors and draftsmen are brought in to do the work. At Gorgas the bunkhouse is designated simply the Bunkhouse, and there is another drawing for the Foremen Quarters, which looks very much like the Gorgas Bunkhouse but not the Mitchell Foremen Bunkhouse. At Gorgas both buildings had an electric light in each room, which isn't shown on the Mitchell drawing. At Mitchell the screen porches were minimized to only one front stoop, and the bathroom is on the rear of the building.

The Mitchell drawing is almost schematic in its simplicity, however, and perhaps the electrical plan was on another sheet. The foremen should have had the superior accommodation, so why the downgrade at Mitchell? This writer suspects that it was a

concern for the length of time a man might work at his job and how much leisure time would be spent in company supplied entertainment spaces.

On the other bank of the slough, the shacks of the Black workmen were very small and cramped, but they were provided with a heater/cooking stove and a cross breeze between the open door and one window for comfort. This is not the same arrangement provided at the bunkhouses (it is slightly better because of the privacy afforded and the fact that wives were allowed) and less than the White family houses offered. The bed, table, and stove were nailed in place and could not be moved. (These items appear to be structurally integral to the stability of the shack itself, which was of very poor and temporary construction.)

These "shacks" were mentioned in the reports at Gorgas, but the drawing does not appear in the record until Mitchell (Figure 3.40). There is a note on the drawing: "Ref. C-9124 Negro One-Room House Design," and the title block notes this is "as built." It is apparent that "Negro" has been erased from the description on drawing C 10109, and the bill of materials lists 2" x 4" "bracing for re-moving the house," which seems to indicate at least some of these buildings were loaded up and taken to another site to be used again. These one-room houses were cramped, little more than barns with floors. Of board-and-batten construction, the shack was 10'-0' x 14'-0" and boasted one door and a wooden shutter hinged to swing outwards as the one window. The built-in furniture could not be re-arranged as it was nailed in place to provide structural integrity to an otherwise very poor and temporary construction; it consisted of a double bed, a table, a 12" wide shelf with pegs below and a "laundry heater," which presumably furnished not only heat and hot water but also cooked food. Incredibly, the construction drawing reads "no studs used

in construction" and shows 2 x 4s for rafters and floor joists.[220] There is no cross bracing beyond that provided by the stationary furniture, which is attached to the walls and floor. Because the note on this drawing also refers to Drawing C-9124, a number associated with Lay Dam, it appears that this was the typical dwelling afforded Blacks throughout the construction period of the 1920s. However, as mentioned above, the prevailing thought at the time was that the Black men would be more likely to remain on the job if they had their women with them, so the Black cabins were one to a worker, affording more privacy than many of the White workers were able to enjoy.

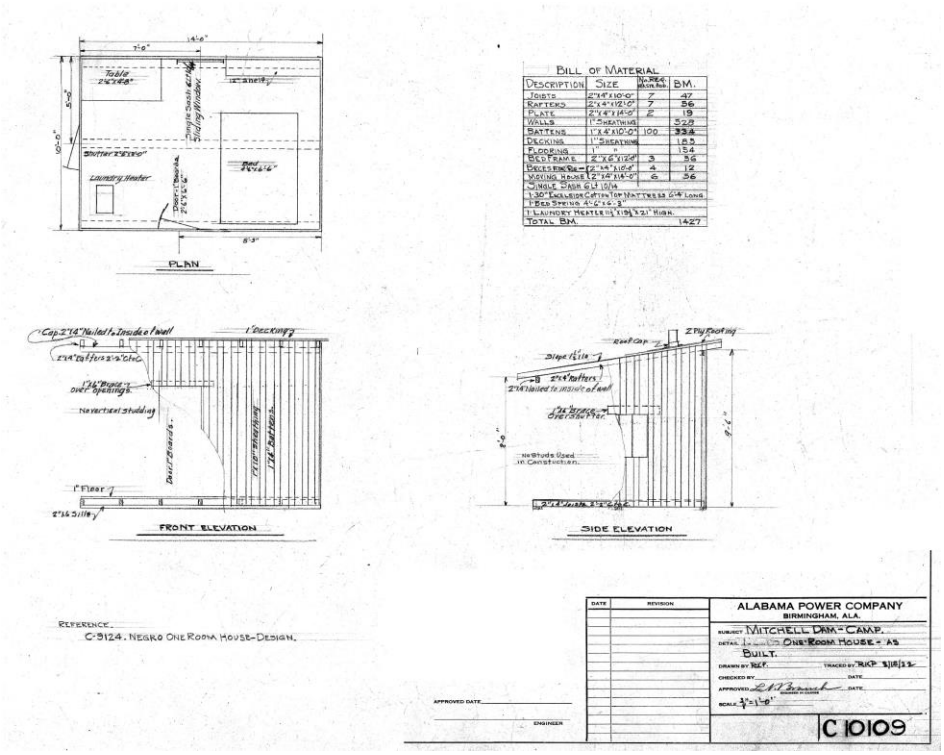


Figure 3.26 One Room House, as built, Mitchell Dam, 3-18-1922. (Modified by author for visibility/composition)

[220] "One Room House—As Built," 1922, Architectural Drawing C10109, Birmingham, AL, APC Archives.

3.3.2 Family Houses

Following the initial construction of the worker housing, permanent operators housing and the housing for supervisory personnel were next on the agenda at Mitchell Dam. While at Lay Dam and Gorgas, the shiplap siding for temporary construction and stucco over hollow clay tile for the permanent housing was the style, here at Mitchell the prevailing character of the structures was more attuned to the local vernacular of board and batten. Even in the "Build-it-Yourself" camp, board and batten was perhaps the only choice since the APC furnished the materials for these houses. The topography appears to have been steeper at Mitchell, so houses were built further back from the roads and sometimes were connected to the road by long wooden boardwalks and stairs as seen in the photo below of the supervisor's cottages (Figure 3.41).

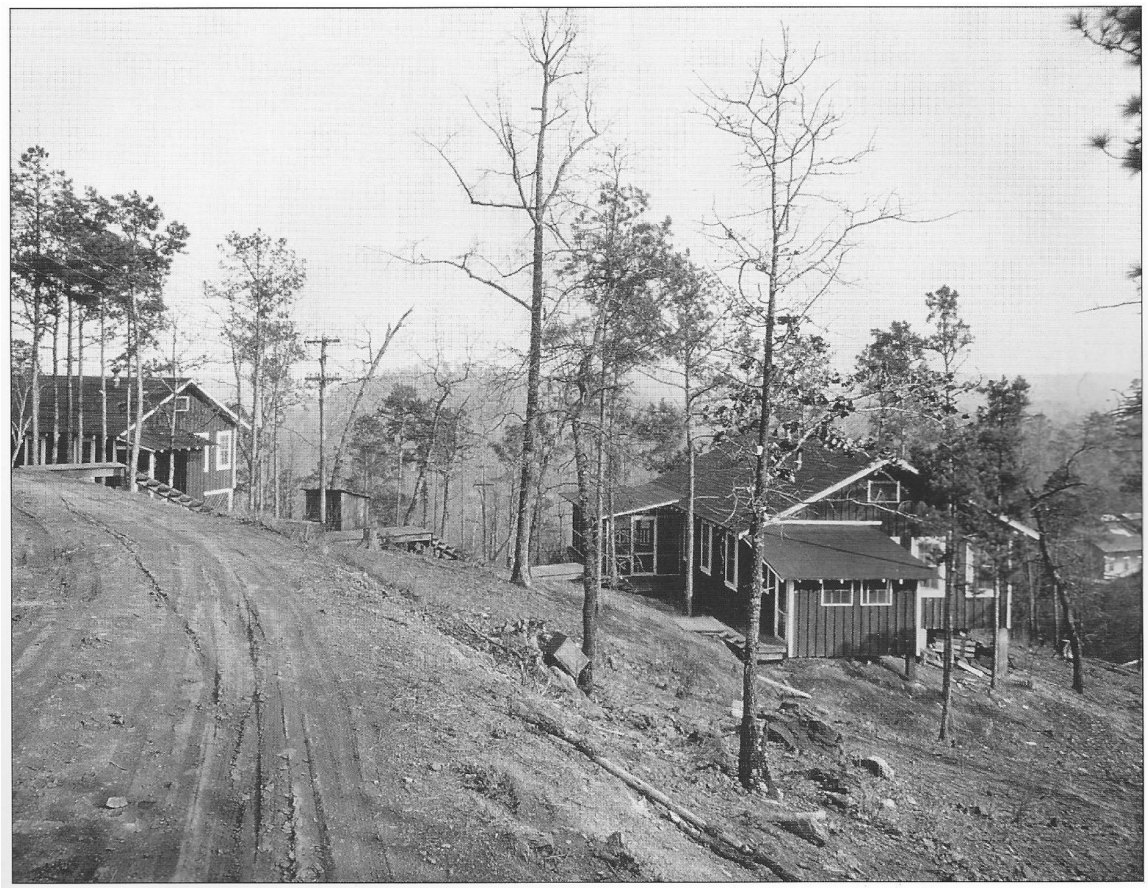


Figure 3.27 Supervisor's Cottage, Mitchell Dam, undated.

The houses were sited far enough apart that there is a sense of privacy, and it appears these, at least, had a beautiful view out over the hills and valleys below. In the "Build-It-Yourself" camp at Mitchell, there was a bit more variation in plans, but not so much in materials since the materials were furnished by the company (Figures 3.42 and 3.43). It appears that additions were made to the "Build-It-Yourself" Camp on an as-needed basis.

Figure 3.28 Klein House, Mitchell Dam, 10-14-1923.

Figure 3.29 Branch House, Mitchell Dam, 10-14-1923.

Note the other houses off in the distance to the right and left of the resident engineer's house (Figure 3.44). The rolling hills required that houses were built along the ridges to take advantage of the views and the cooling breezes on the hilltops. The houses were set farther apart than they would have been in a town because the topography did not often afford practical building sites. Sometimes the landscape was changed by the addition of fill to make a flatter site as at the Type A operator's cottage, but most often the houses were simply built on stilts to perch on a hillside, as in the resident engineer's house.

Figure 3.30 Resident Engineer's House, Mitchell Dam, 3-17-1923. Same house as 3.41.

The permanent operators housing was stucco with a half-timbered Tudor motif in the gables. Two floor plans resulted in two distinctly different front facades

although both boast half-timbered front gables. Unfortunately, the drawings for these operator's houses do not survive in the APC Archives, but the typical naming system employed by the APC designers would indicate that the Type A house had more bedrooms and would have been assigned to a larger family. Both houses have large openings at their right ends that are screened porches, a necessity for comfortable sleeping in Alabama summers.

3.4 Cherokee Bluffs/Martin Dam: 1923–1926

At a time when other power companies were "suspending development," work was begun at Martin Dam on what was to be the highest dam in the South where a small city was planned for the workmen's camp (Figure 3.45). The settlement of Cherokee Bluffs at Martin Dam would be larger than the contemporaneous cities of Tuskegee, Sylacauga, Marion, Alexander City, or Woodlawn, the Birmingham suburb, and it would be a modern city in the wilderness for over 3,000 people "with all the necessities and many of the luxuries usually found in a city."[221] Ever concerned with the public image of the company, the management announced that all materials and supplies would be purchased from suppliers within the state if possible and more than 205 buildings were to be erected, including the superintendent's houses, temporary workers houses, schools and churches, and other service buildings in addition to the structures necessary for the dam construction.[222]

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[221] Anonymous, "Work on Cherokee Bluffs Started," *Powergrams* (July, 1923), 19. Partly advertising hype and partly truth, as Alabama cities were not usually described as luxuriant.

[222] H. A. Powell, "Cherokee Bluffs Notes", *Powergrams* (September, 1923), 14. Typical of the *Powergrams* articles, the writer championed the superiority of this newest camp over all previously constructed camps. "At Cherokee Bluffs the matter of housing and conveniences for the construction men is receiving even more careful attention than it did at Mitchell Dam, where the camp facilities elicited many favorable comments from construction experts and other well-informed visitors."

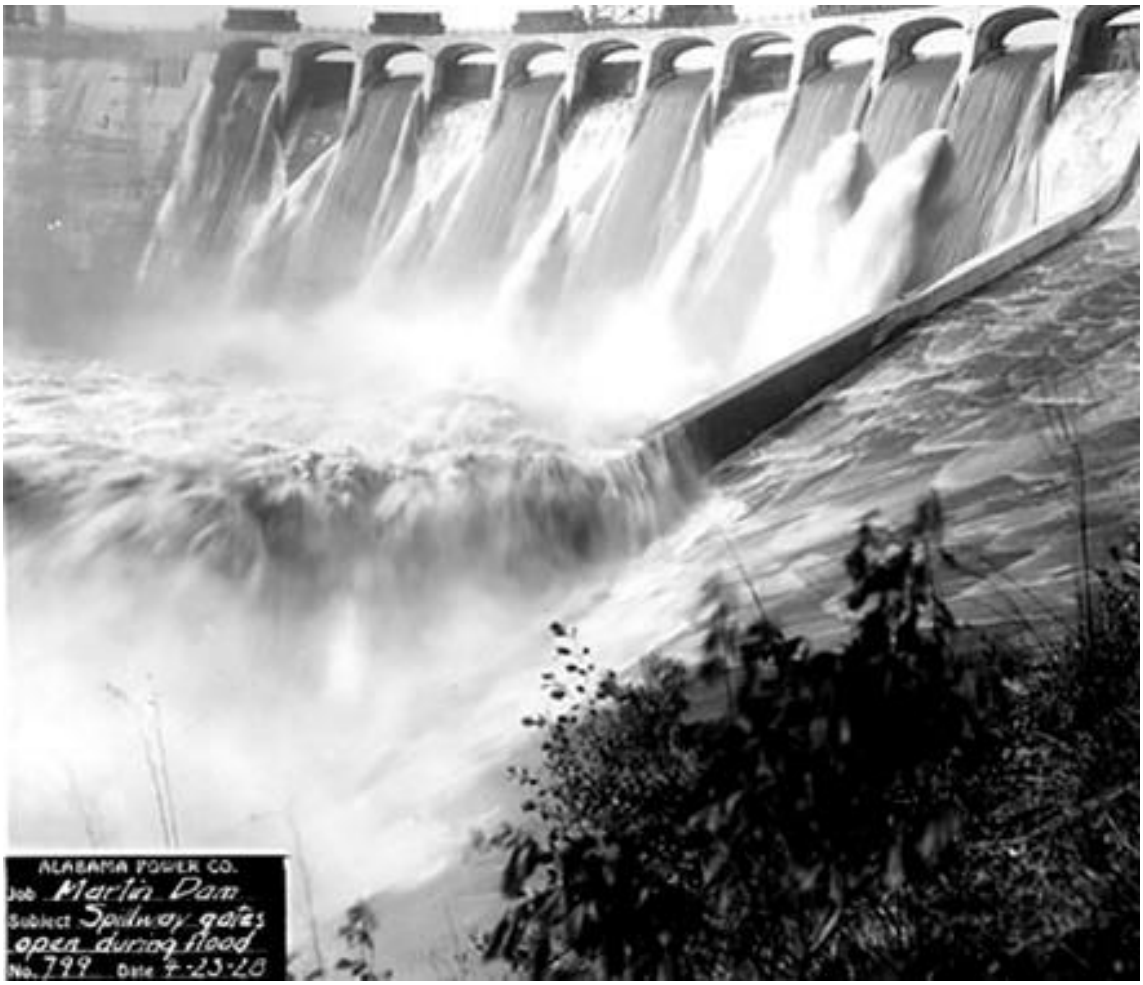


Figure 3.31 Martin Dam, Spillway gates open during flood, 4-23-1928.

3.4.1 Bunkhouses

In July of 1923, three bunkhouses were constructed at Martin Dam, one of which was to serve as a temporary dining room and kitchen for the men while the larger mess hall was under construction. The main mess hall was put into service on September 3, 1923. The settlement was substantially completed by November 1923 and was divided into several camps with names to distinguish them one from another, such as “Shady

Grove" and "Cottage Camp."[223] The documentation of the work by APC photographers shows an idyllic setting for at least some of these cottages in what must have originally been pastureland (Figure 3.46).

Figure 3.32 Cherokee Bluffs (Martin Dam) 4 Room Cottages during construction 10-2-1923.

The camps were "modern in all respects"[224] since there was a water filtration system, a sewage disposal system, a hospital with resident physicians, a school, a commissary, and roads laid out for the several villages in the "city." However, the APC

[223] "Work Pushed at Cherokee Bluffs", *Powergrams* (November, 1923), 21.

[224] *DCC Job Reports, 1926–27, part b*, no page numbers were used. All the camps were declared "modern in all respects" since the latest available practices were followed, and the camps were upgraded from the previous iterations of essentially the same thing.

did not provide these amenities for all its workers. The Black camp, again located on lower ground, nearer the worksite and, significantly, below the White camps, had no provision for sewage. As at other APC camps all the way back to Lay Dam, two blocks of eight houses each shared a common outdoor spigot that supplied all their household water. Located near the Black camp were the sheriff's office (for convenience of policing the Black camp) and the one bathhouse that had to serve all the Black inhabitants of the camp. Besides showers, laundry facilities were also provided at the bathhouse because Black women were able to bring in a little extra cash by taking in laundry.

While at the Mitchell camp the predominant style of the houses was board and batten, at Martin it was again board and batten, but the battens were placed closer together producing the effect of vertical siding (Figure 3.47).

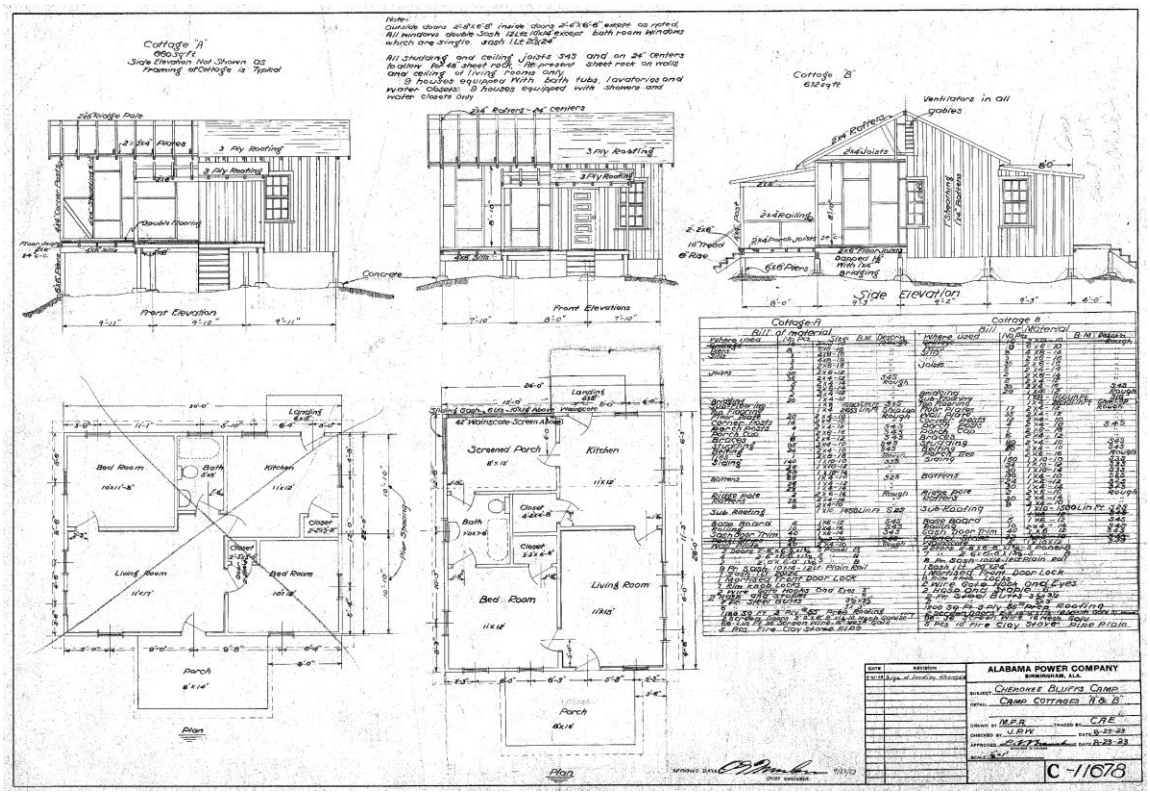


Figure 3.33 Camp Cottages, Martin Dam, 8-23-1923.

3.4.2 Family Houses

A basic floor plan allowed the roof to be turned ninety degrees to accommodate any orientation dictated by the ground conditions of the site. Houses were painted or stained dark with white trim (Figures 3.48 and 3.49).

Figure 3.34 Permanent house, Martin Dam, 6-4-1924.


Figure 3.35 Cottage Grove, Martin Dam, undated.

3.5 Lock 18/ Jordan Dam 1926 to 1929

In 1926 at the site of the proposed USACE site of Lock 18, crews of carpenters set about constructing a "camp to house 1,500 workmen and provide for their food, water supply, and amusement in comfortable, sanitary conditions"; the camp was "modern in all respects"[225] since it had a water filtration system, a sewage disposal system, a hospital with resident physicians, a school, a commissary, and roads laid out for the several villages in the camp. This was the site of the "Devil's Staircase" so the work would be a daunting challenge for the men who took the job.[226] Possessing by now a stable, familiar,

[225] *DCC Job Reports, 1926–27*, no page numbers.

[226] Jackson, *Rivers of History*, 144. Treacherous shoals on the Coosa River began north of Talladega with Embry Bend and Broken Arrow Shoals, but it was below the bridge now connecting Talladega and Shelby counties that the wild water began. The Narrows, Devil's Race, Butting Ram Shoals, Hell's Gap, Peckerwood Shoals, The Nigger Closet, Moccasins' Reefs, and the Devil's Staircase were some of the colorful names of the impassable shoals on the Coosa River. In 1867, Alabama legislators

well-trained, and experienced workforce, the APC was ready to tackle the impossible (Figure 3.50).

The APC bought the land and local crews were hired to work along with the experienced sawyers and skidder crews who cleared the land. Following the same practices used at other APC dams, the lumber was harvested and milled on-site to be used in the construction of cofferdams and formwork for the dam itself [227] as well as augmenting the locally purchased milled lumber used in building the company village.

Crews of carpenters set about constructing a "camp to house 1,500 workmen and provide for their food, water supply and amusement, in comfortable, sanitary conditions"; the camp was again labelled "modern in all respects"[228] since it also had a water filtration system, a sewage disposal system, a hospital with resident physicians, a school, a commissary, and roads laid out for the several villages in the camp.

authorized a survey of the Alabama-Coosa corridor with the intention of making the waterway navigable for steamboat traffic, but it never came to pass.

[227] Jackson, "*Loafing Streams,"* 161.

[228] *DCC Job Reports*, 1926–27.

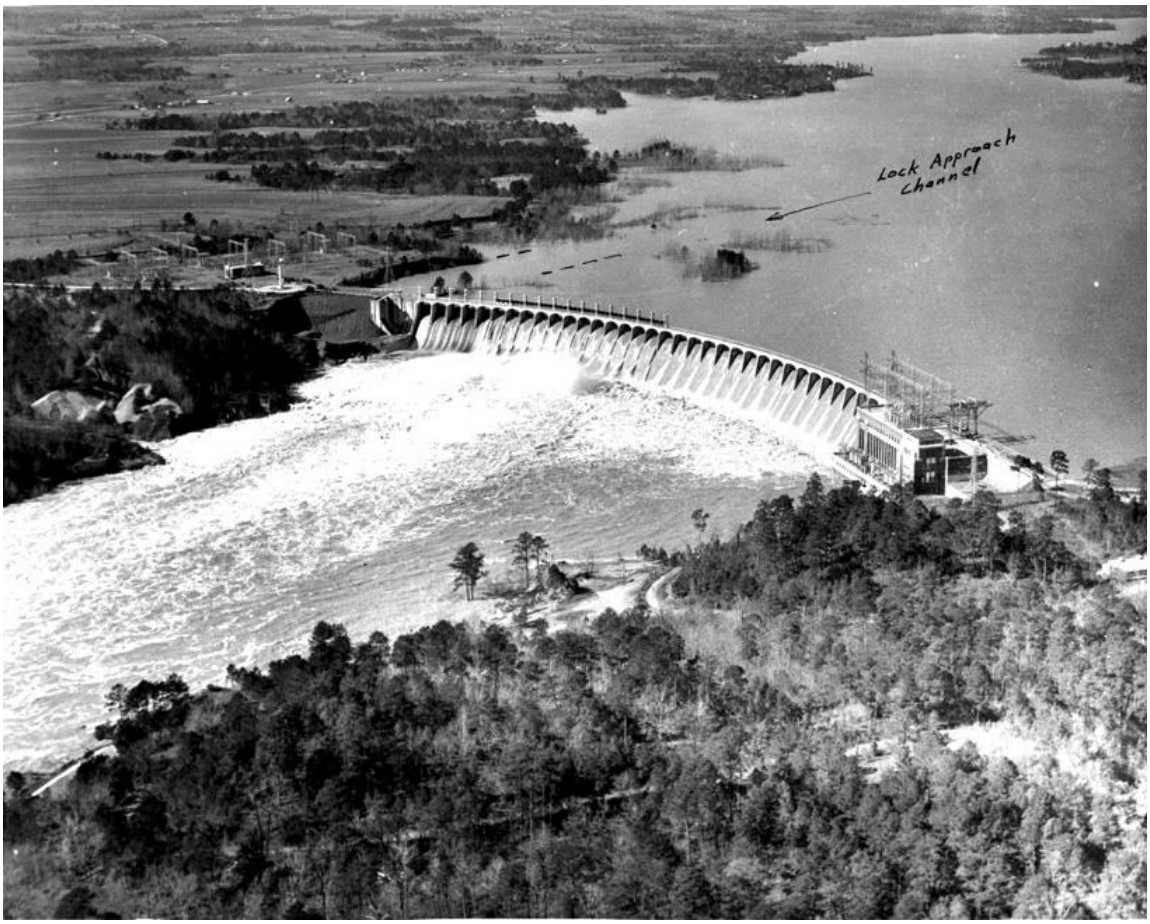


Figure 3.36 Jordan Dam with Powerhouse and Camp on right, undated.

As usual, the construction company assembled a construction report narrative that was handed over to the power company; at the same time, the control of the site was passed to the APC. This narrative describes the general plan of the site, the major structures on it, and the organization of the labor force (over 1,700 workers were employed at its peak),[229] enumerating the chain of command from the Construction Manager, A. C. Polk, the superintendents for layout and design, job superintendents who rotated through as they was transferred from one site to another, engineers accountants

[229] "Jordan Dam to be Turned Over to Operating Department on January First," *Powergrams,* December, 1928, 4.

and timekeepers, warehouse managers, the lumber managers, assistants, clerks checkers and stackers who were responsible for producing and storing the 12.5 million feet of lumber used in the construction of the dam and camp, to the medical and safety officers, giving some information about what jobs were performed by each job category. This document also contained records of payrolls and injury reports and was instrumental in reconstructing and image of life in the camps.

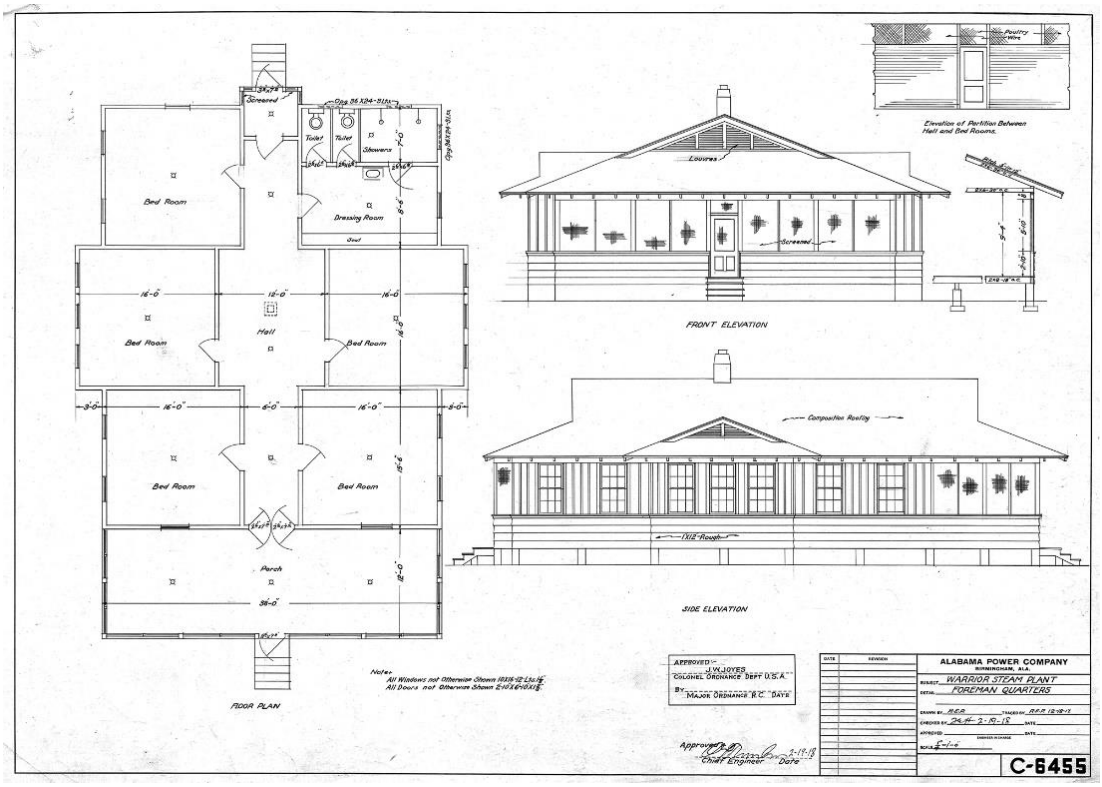
The location of the camp was planned with a consideration of the shade trees, drainage, and the availability of suitable ground, so the east side of the river was used for the camps both temporary and permanent. The west side of the river although flatter and under cultivation was fourteen miles nearer to Birmingham (because one would have to cross the river at Wetumpka to reach the east side and nearer the railroad lines). Employees were not expected to travel frequently, but the transportation of materials and goods meant the development of the railroad terminus and other plant structures and facilities necessitated placement on the west bank.[230] A bridge over the river was planned so that the workmen could have access to the plant operations on the west bank because the transportation of work crews would be expensive in terms of time and fuel.

3.5.1 Bunkhouses

Bunkhouses were furnished for the unmarried White men who worked as engineers, clerks, and foremen (Figure 3.51). There were four seven-room houses divided up so that two men shared each of five of the rooms, and three men shared each of the remaining two rooms. They were somewhat nicer than bunkhouses although the bathrooms were still shared. Mechanics had slightly less grand housing, but it was more

[230] *DCC Construction Report Narrative, Jordan, 1926–27*, 30.

than adequate by company standards. Mechanics were given ten six-room houses, each housing twenty men.[231] Unfortunately, the drawings for these bunkhouses are not present in the archives, but there is a drawing for the hotel that appears to be related to a bunkhouse design. (The hotel is discussed in Chapter 4.) The description of the bunkhouses for twenty men fits nicely with the Foremen's Quarters design at Gorgas, which is pictured here for comparison (Figure 3.52). The house is a six-room house but only contains five rooms set up for beds as the sixth room is given over for the bathroom/dressing room. The bedrooms at 16'0" x 16'0" could easily accommodate four single beds in each room, so the house would lodge twenty men. The APC frequently used the same plans for buildings if they did not relocate and re-use the same buildings.



[231] *DCC Job reports, 1926–27*, no page numbers.

Figure 3.37 Foremen's Quarters, Gorgas Camp 2-19-1918.

Figure 3.38 Engineering and Clerical Bunkhouse, Jordan Dam, 12-1-1926.

In an unusual move, the company split the working and living arrangements at Jordan Dam (Figure 3.53). Most camps were concentrated as much as was comfortable so that the men could be close to work and could be called upon in emergencies. Still, housing followed the usual plans, locations, and sizes with minimal changes except for stylistic references and the upgrades of appliances that would be appropriate for the later date of construction.

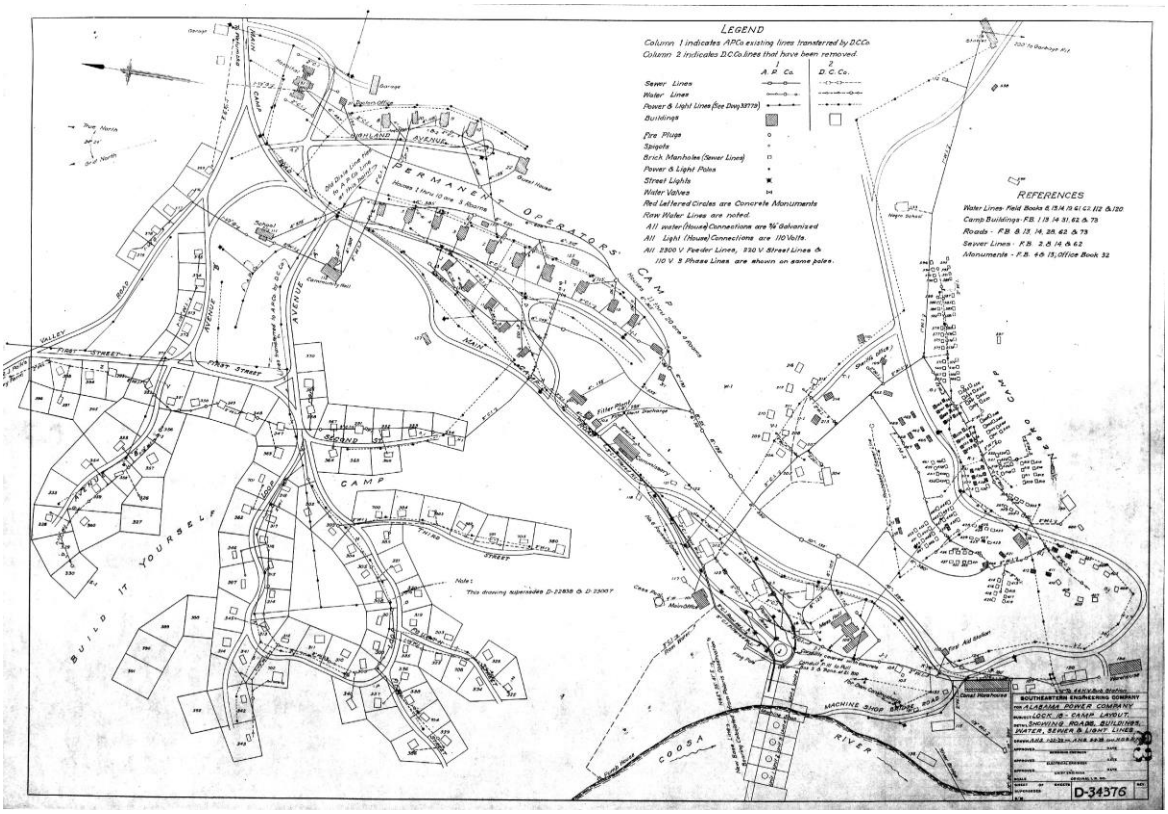


Figure 3.39 Jordan Dam (Lock 12) Camp Layout 1-25-1929 White camp on the left, Black camp on the right.

However, the APC still did not provide these amenities for all its workers. The hierarchy was obvious to all in the arrangement of the areas of the camp. The Black camp was located on lower ground, nearer the worksite, and below the White camps (Figure 3.54). There was still no provision for sewage, and two blocks of eight houses each shared a common outdoor spigot that supplied all their household water. Located near the Black camp was the sheriff's office and the one bathhouse that had to serve all the Black inhabitants of the camp. Besides showers, laundry facilities were also provided there with no substantial change from the arrangement at Mitchell Dam/Duncan's Riffle.

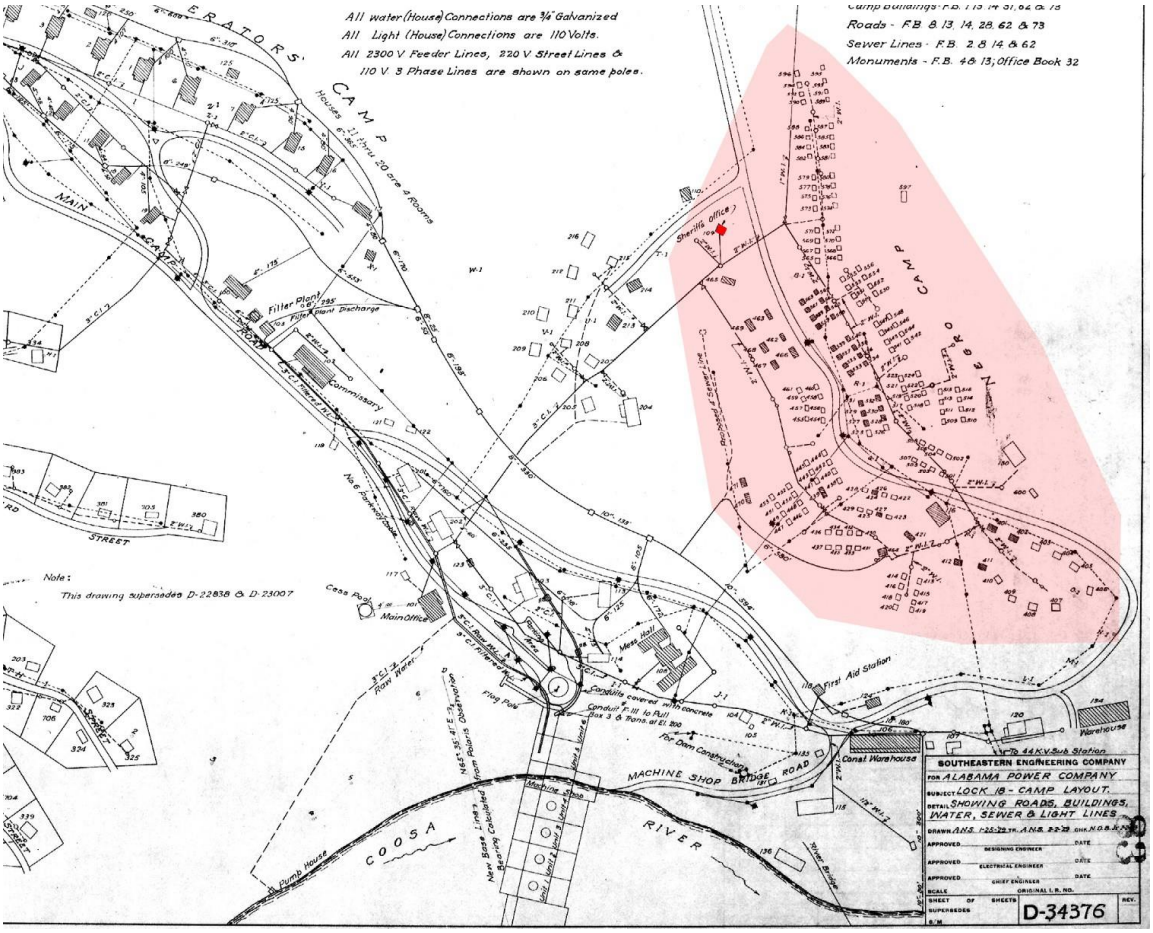


Figure 3.40 Negro Camp (pink area) with Sheriff's Office shown in red. Enhanced by author.

Nor was the housing for Black workers as spacious and comfortable as in the White camps. In the Black camp, there were twelve bunkhouses, each accommodating twenty-four men. (White bunkhouses accommodated either sixteen or twenty men and had attached washrooms with showers and water closets.) In the belief that married Blacks would remain more focused on their work, 144 one-room family houses and seven two-room houses were provided for these men. Here a dance hall and a pool room were also provided for the Black workers.

3.5.2 Family Houses

The White villages at Jordan Dam were organized on different scales and with an explicit hierarchy of workers. The operator's village consisted of buildings of frame construction with baths and electric ranges for cooking (Figure 3.55). There were eleven five-room houses, ten four-room houses, and one three-room house, designated for the superintendent of the operators. The contractor, Dixie Construction, expected to repair and refinish these houses at the end of the project and turn them over to the APC for permanent worker housing,[232] but the construction was still the same: frame houses with no insulation. Bunkhouses were furnished for the unmarried White men who worked as engineers, clerks, and foremen.

The "Build-it-Yourself" Camp offered approved workers who wished to build their own "cottages" ninety-five lots from which to choose. These varied in size and shape but were laid out pleasantly along winding roads in a rolling, wooded section high above the worksite (Figures 3.56 and 3.57). Building materials were furnished at cost (provided by Dixie Construction) with no charge for water and electricity.[233]

It was not all work and no play. The planners recognized that the men needed entertainment too. In all the construction camps built after Lay Dam, similar outlets were provided for both Whites and Blacks, but the main consideration was to keep the men occupied in their spare hours so that there would be no opportunity for troublemaking. At Jordan Dam, Whites had a poolroom containing five pool tables; a soft drink and cigar stand; and a Whites-only community hall for other recreation such as dances, plays, and Sunday school meetings. A concessionaire showed a movie at the community hall once a

[232] *DCC Job reports, 1926–27*.

[233] *DCC Job Reports, 1926–27, part b*, no page numbers were used.

week, as was done in the church of the Black camp, but for Whites, there were a stage with dressing rooms and a fireproof movie machine booth. This building was later taken over by the APC and used as a second school, which increased the hours of its use though it could still serve for special events.

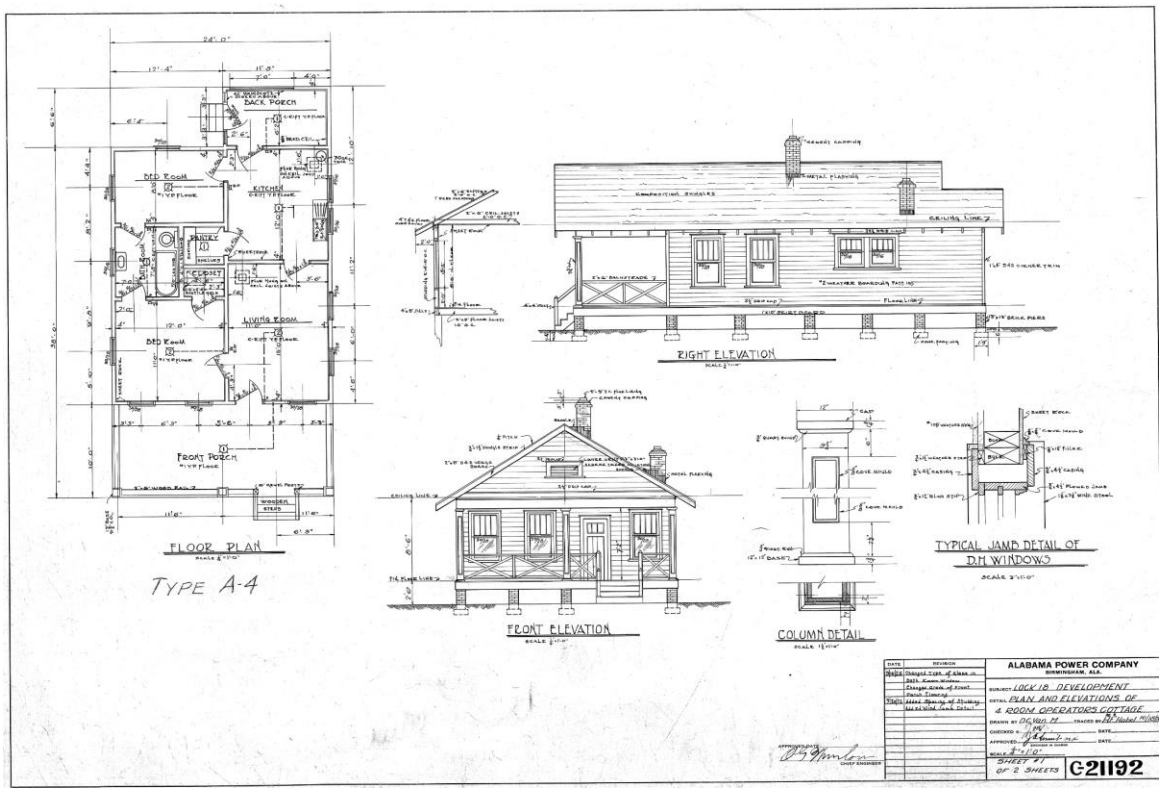


Figure 3.41 Four room Operator's Cottage, Jordan Dam, 9-20-1926.

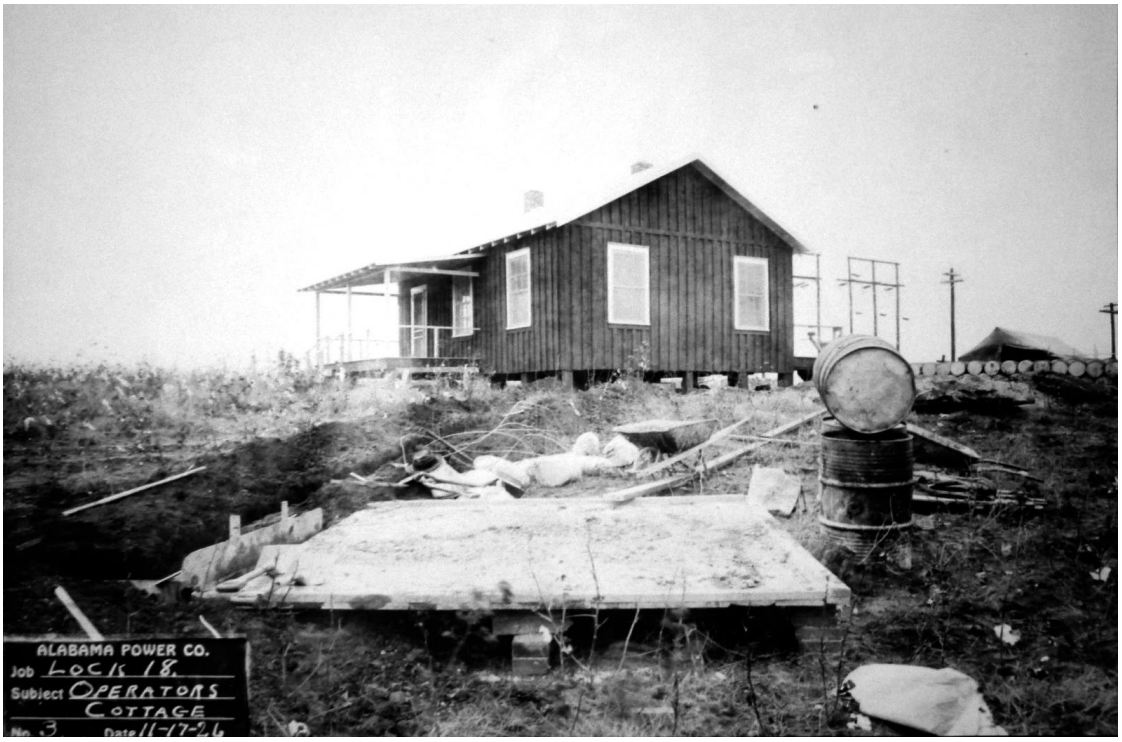


Figure 3.42 Operator's Cottage, Jordan Dam, 11-17-1926.

Figure 3.43 Cottage Camp, West Row, Jordan Dam, 12-1-1926.

Because Wetumpka was so close by, it appears that the APC made a better attempt to keep the men occupied after work although they must surely have been worn out working at all hours to complete the dam on time. Harvey Jackson points out that even Montgomery was not too far away to tempt men to have a night out on the town.[234] The truth was that order was kept in the camp without much trouble. Men did not want to jeopardize their jobs or make a scene, and the presence of families at the camp must have helped keep the atmosphere calm. The sheriff's office was located near the entrance to

[234] Jackson, *"Loafing Streams,"* 167.

the Black camp and close enough to the White camps that law enforcement was uncomplicated even though there was apparently a ready supply of illegal liquor to be had outside the camp gates. Jackson paints a fine image of camp life with colorful anecdotes from workers and children alike, but his most significant point is "What Alabama Power created at Jordan Dam was a village *and* a community."[235]

People do tend to remember the good times better than they remember the bad, and both the Blacks and Whites must have been close-knit because they were so isolated from regular social outlets. Children were in the camp for the duration of their parents' time there; workmen had their various company-sponsored social and athletic teams active in spaces provided by the APC, and there were regular church services. The camp boasted a fine hospital (the culmination of those that the DCC had built and the APC furnished before at other camps), and hospital records show that most accidents treated were minor ones. Still, there was a great risk in the work particularly in the early stages when common laborers were new to the job.

Unfortunately, eleven men were killed building Jordan Dam in part because of the rush imposed by Tom Martin to complete the job ahead of the projected date. Camp sanitation had also improved; children were educated, and the commissary stocked fresh meats and vegetables for those who were not fed in the excellent mess halls. The APC did make an effort to keep its workers happy, healthy, and on the job with apparently successful results.

Over time as the camp changed from a construction site to a permanent worker village, the best houses at the APC sites were used for the permanent workers and then

[235] Jackson, *"Loafing Streams,"* 164.

either abandoned or sold to other owners as employees elected to move into a nearby town. By the 1950s, the new APC hydro projects were being built close enough to nearby communities for workers to commute to the job, and automobile ownership was more common so new worker housing was no longer constructed. As the workers at the existing camps moved away, any houses not sold were demolished. Today, the wooded hillsides disclose only the occasional concrete staircase or broken sidewalk leading to a leveled spot where a house once stood, cherished by a family that lived there. The APC camps have disappeared by slow attrition.

CHAPTER 4. OTHER BUILDING TYPES AT THE APC CAMPS

While the housing of the workers and their families was important, there were other structures necessary to complete the worker's village or camp. This portion of the dissertation will focus on schools, hospitals, mess halls, and other community structures necessary to provide the inhabitants with the basic amenities of a community such as the APC was trying to build in its camps.

4.1 Schools

Schools were another way to ensure the best employees were attracted to the work. For instance, in North Carolina, there was no comprehensive public-school system, so textile mills were obliged to devote substantial resources to provide them. Schools were not simply an act of altruism but a profit-maximizing mechanism to develop a disciplined industrial workforce and attracted workers recruited from the cotton and tobacco farms to the mills.[236] Parents who recognized the importance of school actively searched out mills with the best schools; these were considered the families that made the best workers, so the schools were used to screen applicants.[237] Mills were long-term propositions that could expect to employ the children of their hands in the future. Schools taught the usual subjects but also "punctuality, regularity of attendance, reliability, attentiveness, respect for authority, and ambition" that were all desirable traits in a mill worker.[238] School also performed a child care function when both parents were employed

[236] McHugh, Cathy L. "Schooling in the Post-Bellum Southern Cotton Mill Villages." *Journal of Social History* 20, no. 1 (1986): 149–61. Accessed February 22, 2020. www.jstor.org/stable/3788280.

[237] McHugh, 151–152.

[238] McHugh, 153.

and kept children away from temptations while serving as a pool of spare labor when the need arose.[239] It is unlikely that the APC camps would have need of school-age children for any of the work or that many of their mothers were occupied outside the home, but the excellence of the workman could be seen to accrue when he valued the education of his children.

The schools at three representative worker villages will be described to illustrate the types of schools and the various iterations they went through during the 1920s. The changes were in response to changing demographics that were expected and planned for by the APC.

Over time, there were several different schoolhouse iterations to meet the needs of the changing camp populations. Some schoolhouses were extant when the APC occupied an area, but most of the time the new worker camps were constructed *ex novo* and in rough and difficult terrain so that the plans drawn at the main office had to be field modified to suit the local conditions. These structures were built with green lumber, cut and milled on-site, or with materials sourced from local suppliers. Although the quality of the craft might have been excellent, many structures in the camps were not expected to be used for more than three or four years, except for some buildings that were repurposed over time as needs changed.

4.1.1 Warrior Steam Plant/ Gorgas Steam Plant (1916 through the 1930s)

At first, the children of White Gorgas Plant workers attended school in the original school of the Winona Coal camp, located high on the ridge above that camp to the west of Baker's Creek. The school was located across from the old coal company

[239] McHugh, 154.

commissary; the latter was pressed into service as a library for the school, according to a company newsletter (*Powergrams*) report (see Figure 4.1). In September 1928, the monthly report of the DCC states the old coal company commissary was remodeled into a schoolhouse to care for the growing Gorgas population as the permanent workers began to arrive.[240] The work is described: "Partitions were built dividing the old building into four main classrooms, office for principal and cloakrooms. A hot water heating system was installed, plumbing, lights, and water lines. To date, the school is 95 percent completed, plumbing on heating plant and painting remaining to be done."[241] The building was a substantial wooden structure facing the road that ran down toward the Gorgas plant. It consisted of eight grades and had an attendance of from 115–120 students from the APC families and other families in the area, including the adjacent Winona Coal camp.[242] Because the first grade always had more students, it was held in a classroom separate from the other grades, which were coupled together; sometimes the groupings changed according to how many students were promoted each year.[243]

After ninth grade, students who wished to continue were bussed to the county high school in Jasper about twenty miles northeast.[244]

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[240] *DCC Monthly Report* (September 1928). Black workers lived in a separate camp and a separate temporary school (which was also the church) was furnished for Black schoolchildren.

[241] *DCC Monthly Report* (September 1928), Sheet "A."

[242] S.S. Simpson, "Gorgas Steam Plant Has Educational System" *Powergrams* (September, 1924), 25, 33. Also see Willie Whitsit, "A Visitor's View of Gorgas." *Powergrams* (October, 1924), 14.

[243] Royce Dean Northcutt, *I Remember Gorgas*, self-published, 2000, 49–50. Northcutt states there were always some students held back and some double promotions, which may have had more to do with equalizing the class sizes than student performance. He also says that some students never passed first grade since the mentally retarded of all ages were sent to school each day because there was no other place for them to go.

[244] Northcutt, 46, and Simpson, 25. Alabama did not require children to attend school after the age of 16, so many did not continue their schooling, but went to work to help support their families.

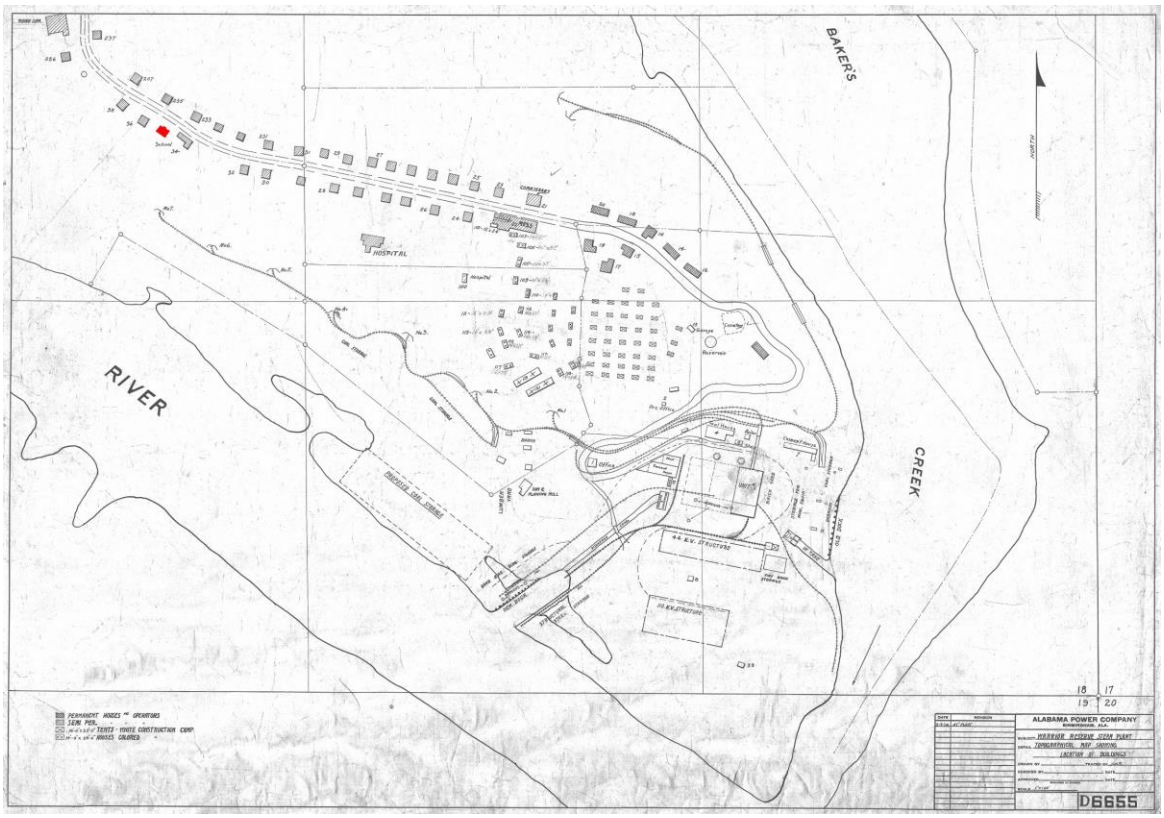


Figure 4.1 Gorgas Steam Plant plat, school in red, 1918.

By October 1928 the full cohort of boilers was online, and installation crews moved on to other jobs, so the population of the camp changed to only permanent residents.[245] Although it was not clearly stated in the DCC reports, it appears another new school was put into service in 1920. Images of the new schoolhouse indicate a fine structure consisting of a U-shaped plan with welcoming porches with wide single doors covered by bracketed, segmental-arched roofs (Figure 4.2).

[245] *DCC Monthly Report* (October 1928), 25. The "You-Build-It" camp and the colored camp were in the process of being dismantled along with the pool rooms, bakery, and barbershops. Several families stayed in the camp although no longer employed.


Figure 4.2 Gorgas School, 1920.

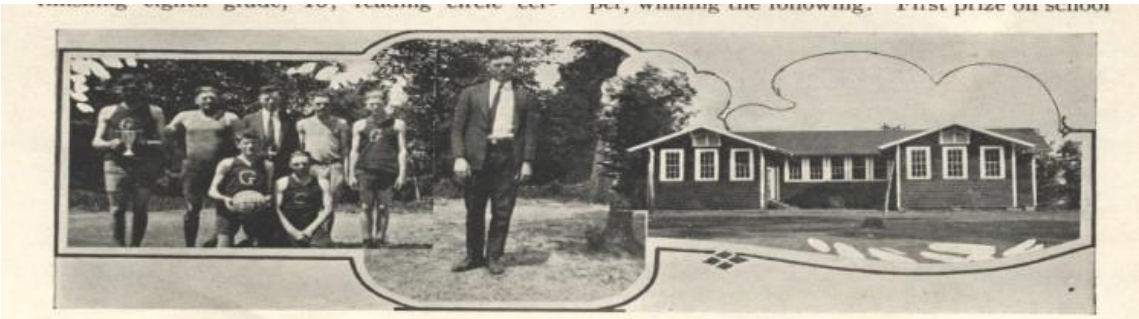
The 1920 image implies a newer form than that of the image made in 1919 that shows bracketed, gabled roofs over two porches sheltering double five-panel doors on a flat façade (Figure 4.3). Both schools had shiplap wooden siding painted the same dark green with White trim that the entire permanent camp wore, but the doors were doubled on the older building, probably more for ventilation than for accommodating hordes of schoolchildren. A close inspection of the windows reveals that the 1919 school had four-over-four windows, while the 1920 school had six-over-six windows. The wings of the 1920 building had five bays; the left wing (in the images) had a door in the center and the right wing five windows. A second entry was in the belly of the "U"; the playground and a fountain for washing hands occupied the area between the wings.


Figure 04.3 Gorgas School, 1919.

Another image published in 1923 (Figure 4.4), shows a different plan and six-over-six windows, pointing to an upgrade and the possible existence of two schools operating concurrently in Gorgas for some period of time.[246] Judging by the slope of the roof gables and the fact that no entry is visible, this image may show the rear of the 1920 school, or it may be yet another schoolhouse. However, if it is the same building, the rear wings are not as broad as the front wings because only three windows were fitted across

[246] "Report of Gorgas School," *Powergrams,* July, 1923, 30.

the walls beneath each gable in the 1923 image, and the 1920 image shows four windows and a door under the gable.



Left: Championship Gorgas Scout Troop basketball team with trophy. Center: Prof. C. R. Walker, Principal. Right: Gorgas School.

Figure 4.4 Scout basketball team, 1923.

The 1923 image shows (Figure 4.5) the entry porches were placed on the walls inside the wings of the "U." Both buildings had simple gabled roofs with louvered vents in the top of the gable ends. The different porch roof configurations seem to indicate these were two different schoolhouses and that the 1919 image is clearly a third. This overlap may have been caused by the APC's need to continually upgrade its facilities to retain labor and a rapidly growing population. In addition to Gorgas students, the school began to serve students from nearby Payne's Bend in 1924 after the county consolidated its schools and closed the one in that area.[247] There was also a new two-year program begun in 1924, the Gorgas Technical School, which provided "an opportunity for the really ambitious to attend classes in engineering studies."[248]

[247] Northcutt, 46.

[248] "News from Gorgas," *Powergrams,* July, 1924, 31. The news from Gorgas was given in short paragraph- long reports. The students, who were employees of the APC, funded this school. The class was engineering mathematics and thirty-five students were in regular attendance.

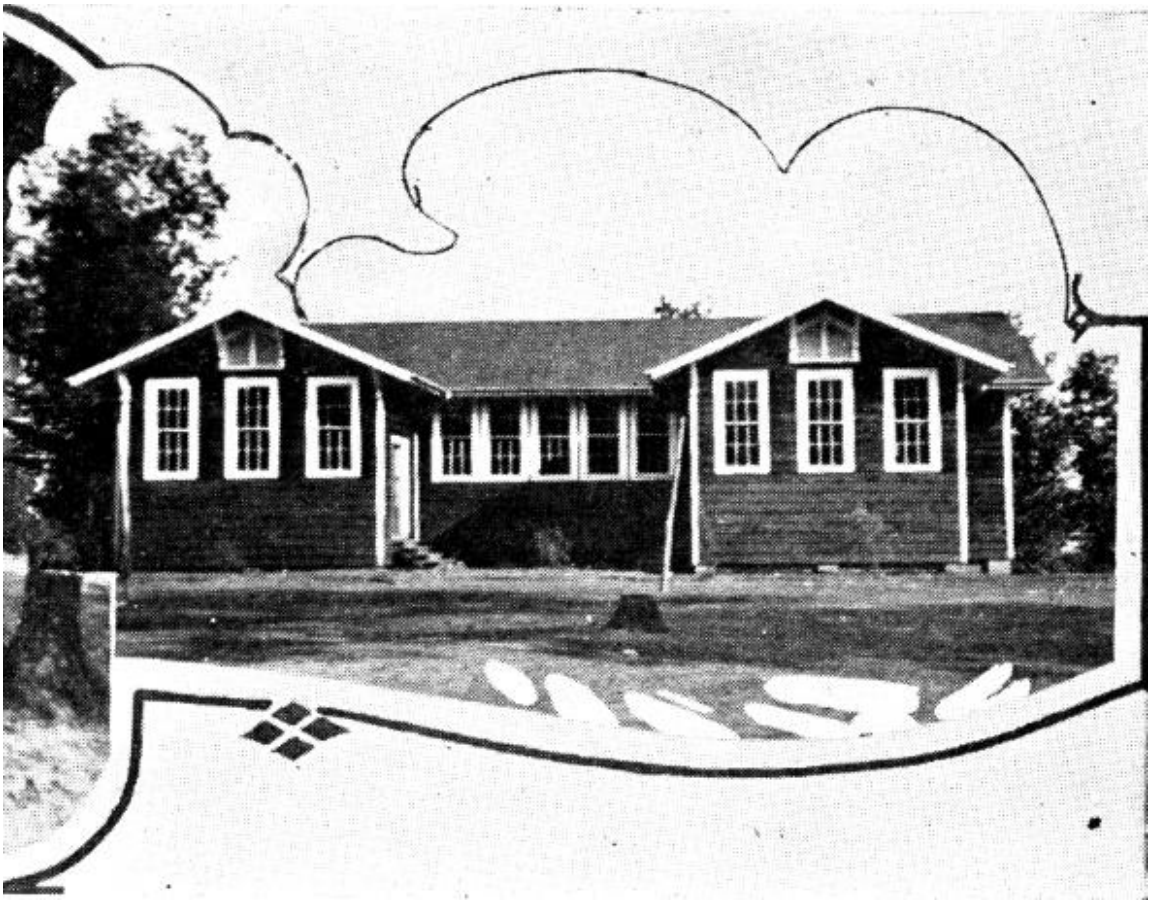


Figure 4.5 Gorgas School as shown in Powergrams, "Report of Gorgas School," July 1923.

The monthly report for December 1928 includes a note under "miscellaneous work" that another addition had been made to the community hall so that it could be used as a schoolhouse.[249] A notation in the financial accounts shows expenditures during the month of December to have been $27.50 for the "operation and maintenance of the schools" and $120.00 for labor expenses for the schools.[250] (Note the use of the plural.)

[249] *DCC Monthly Report* (December, 1928), 7. The report continues, "The hospital has been altered also, but the work has proceeded 'piecemeal,' as there were not enough forces on the project to handle them at one time. All work except alteration of the hospital and the addition to the Community Hall was completed by the end of the month, and both the latter items were underway."

[250] *DCC Monthly Report*, 1928, 20.

At the end of 1928, the Dixie Construction Company camp was turned over to the APC for its permanent worker village. The loss of the children of DCC workers would reduce the need for two schoolhouses, but the influx of the county schoolchildren may have made up the difference for a few years, resulting in the perceived need for two schoolhouses in 1928.

In his memoir of his childhood at Gorgas, where Royce Northcutt began school, one building was operating as a library, but "it was put to various other uses" while he was in attendance.[251] Northcutt remembered his school days well enough to recreate the school plan in a hand-drawn diagram (Figure 4.6).

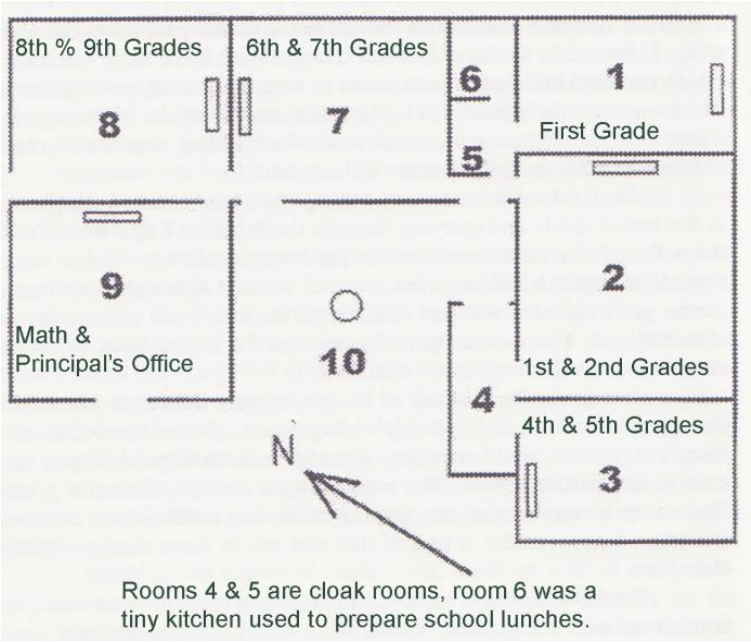


Figure 4.6 Gorgas School layout, Royce Northcutt.

[251] Northcutt, 31.

This drawing bears a strong resemblance to the 1920 school building in the photograph, at least the portion we can observe in the photograph.[252] Northcutt began school in 1930. He mentioned only one schoolhouse although he thought there might have been a pre-school in operation at that time since his older sister told him about it.

Although this is hearsay, it adds some credence to the idea of two schools: one the old renovated coal company schoolhouse of four rooms and the other the old repurposed commissary with six classrooms. By the time Northcutt began going to school, all the temporary workers had moved on, and the older school had become the library. Often, preserved documents do not give the researcher a clear, whole picture.

Another complication at Gorgas was that as demand for power increased new units had to be added to the plant, meaning an influx of construction workers into the established camp and variations in the number of schoolchildren as workers came and went. If the number of schools is questionable, we can at least state that because the camp was constructed quickly as part of the war effort and because of the changing nature and numbers of the students living at Gorgas and surrounding areas, the schoolhouses were often remodeled, renovated, and/or replaced.

4.1.2 The Schoolhouses for Martin (1923-26) and Jordan (1926-29) Dams

At Jordan Dam a temporary school for the White children had been constructed by 1926; after the construction phase of the project was complete, the APC took over the village. A new school was needed for the permanent employees' children, so it was

[252] Northcutt, 50–57. The drawing looks schematic, but considering Northcutt was an elderly man remembering his childhood when he made the diagram, it seems very close to the probable layout as surmised from the photograph.

constructed by making an addition to the old Community Hall. Notice the triple six-over-six windows in the photograph of the Community Hall (Figure 4.7).

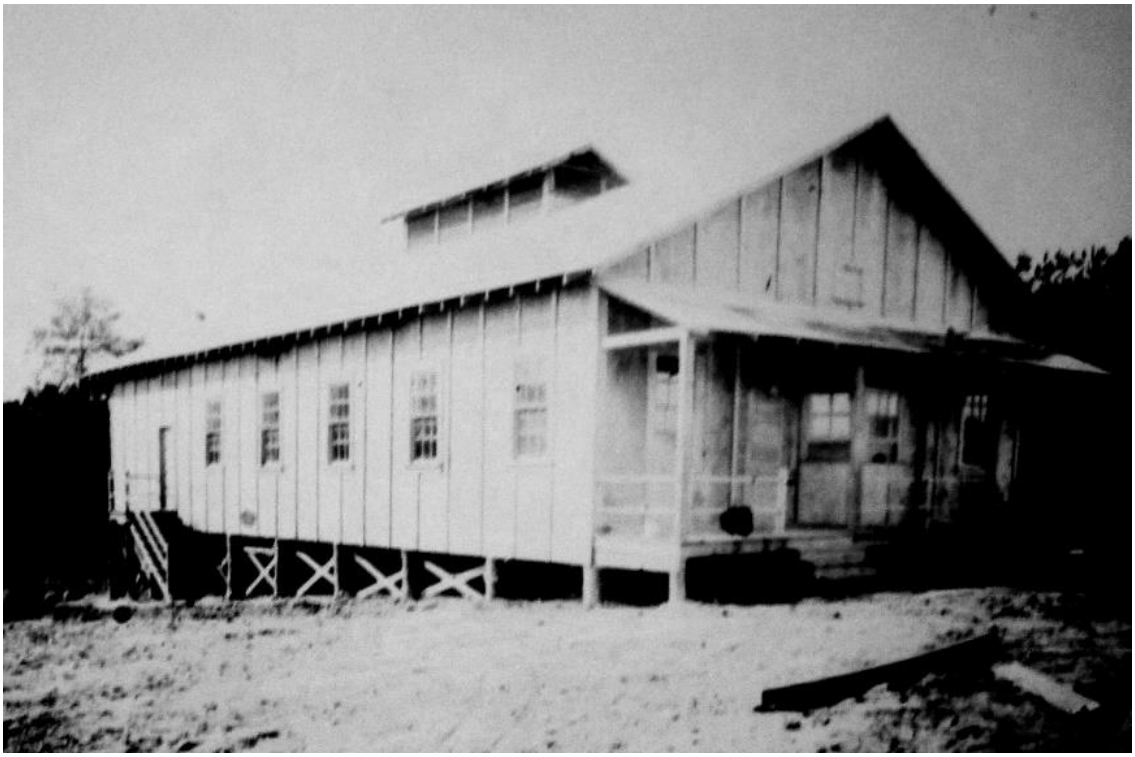


Figure 4.7 Jordan Dam Community Hall, 1927.

This Community Hall itself had begun as an operator's house[253] but had been converted for the recreational use of the White workers and their families at some point during the dam construction phase. The schoolroom addition consisted of a reconfigured porch and two small toilet rooms at either side of the long side, abutting the pre-existing exterior wall of the Community Hall (Figure 4.8).

[253] The operator's house was a house provided to contracted workers and their families.

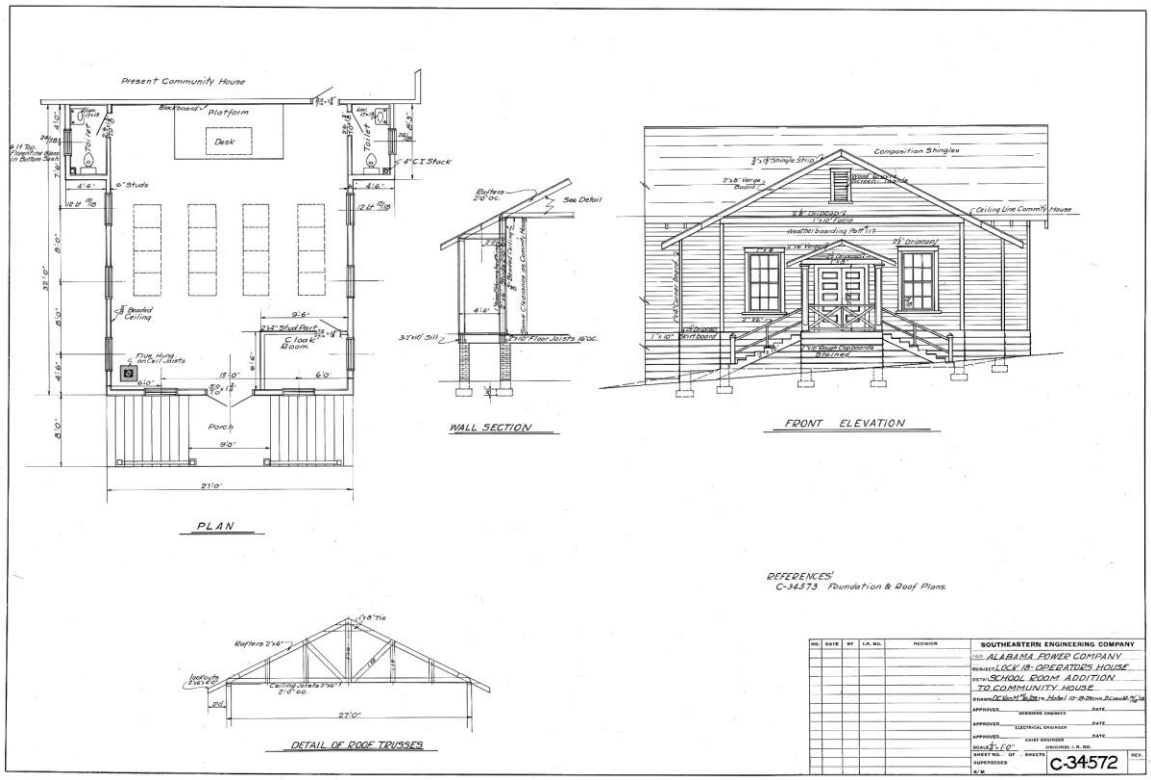


Figure 4.8 Jordan Dam School Addition 10-18-1928.

The plans for the Community Hall at Jordan Dam are not in the archives, but the drawing for the Martin Dam Community Hall is, and it may reasonably be presumed to be very similar (Figure 4.9). The dimensions for the Martin Dam Community Hall are 36’0” x 66’0” with a 16’ height (no ceiling), and the walls, decking, and subfloor were of rough, green lumber cut during the clearing of the river basin. The interior was fitted out with a stage opposite the projection booth that was flanked by two doors leading to the roofed front porch. Two dressing rooms with lavatories border the stage neatly tucked into the corners of the room and with doors onto the stage for dramatic entries and exits. One door on the long wall near the stage opened to the outside, providing an alternate

egress. This is very similar to the description of the Jordan Dam Community Hall, although it is longer in length by six feet.

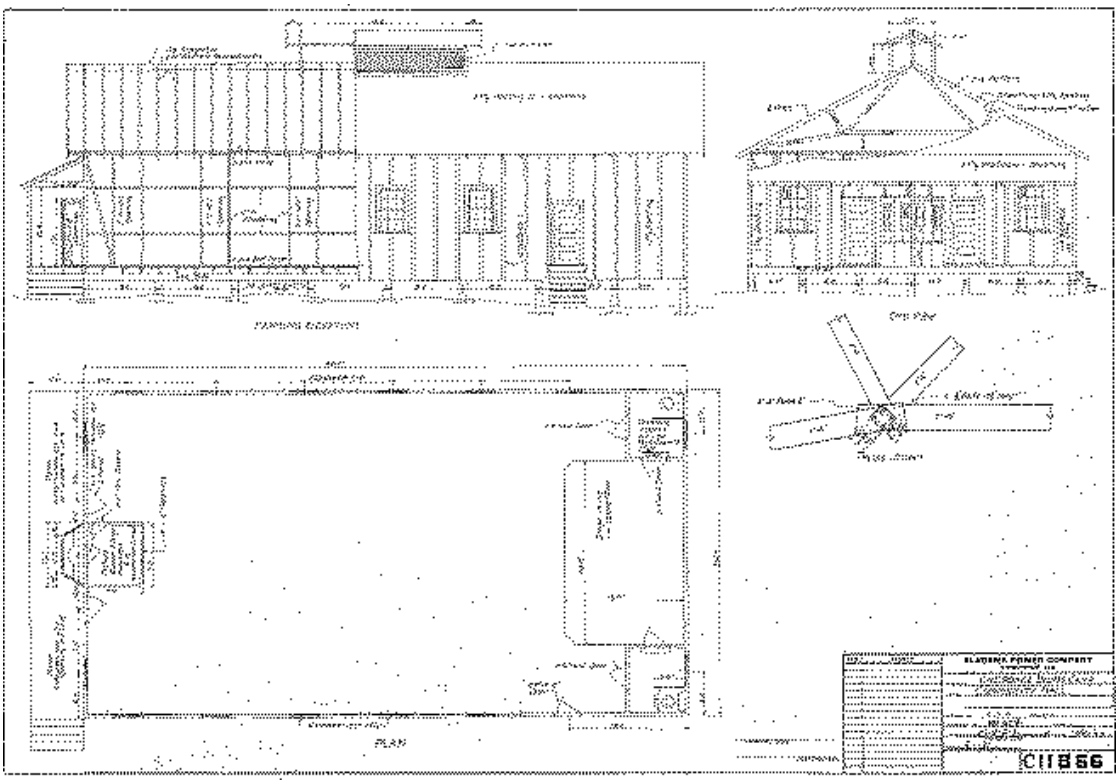


Figure 4.9 Martin Dam Camp Community Hall 10-8-1923.

The DCC Reports indicated that the Community Hall at Jordan Dam had equally spaced windows that ran along both long walls for cross-ventilation; one ventilator was placed on top and louvers at each end in the gables. The ventilator is prominent against the sky in the 1927 photo of the Community Hall (Figure 4.7). The cost for the building was $2675.57,[254] including a stage with dressing rooms and a fireproof machine booth (for the projector) so a concessionaire could show motion pictures once a week. The

[254] DCC, *Jordan Dam Construction Report: Costs, Job Cost Analysis, No. 13 (*Jan. 20, 1929), 125.

residents also held dances and Sunday school meetings; it was intended for the recreation of the residents as well as serving as the school.[255]

For the Jordan Dam schoolroom addition, it would make sense to place the plumbing near the existing lavatories in the Community Hall (see the lavatories on each side of the stage in the plan of the Martin Dam Community Hall). Space was provided for sixteen desks in a four across four deep grid, one cloakroom, and one corner was taken for the wood-burning heater. The room addition was wood frame with six-over-six windows, double entry doors of five panels each and because the ground sloped, the entry porch had two staircases that were placed on either side of the landing at the double door. This would have made it easier to control the entry and exit, particularly if a ticketing system were used. The exterior of the addition is clad in shiplap weatherboarding with a skirt of rough stained clapboards, the same as the Community Hall. Both structures are shown raised on piers of varying heights to accommodate the uneven terrain.

According to the DCC Reports, the original White school at Jordan Dam was 24' x 63'6".[256] The Jordan Dam Community Hall was 36' x 72'[257] and similarly proportioned to the Martin Dam Community Hall. It was taken over by the APC to be used as a school. Once again, there is a troubling disconnect between the photographs and drawings. In each of the photographs (Figures 4.10 and 4.11), the porch roof is not gabled (the entry appears to be on the long side of the structure as it clearly was planned to be at the Martin Dam schoolhouse) and the images also show a chimney although the plan drawings make no provisions for heating of any kind. A photograph dated March 1, 1928, and labeled

[255] DCC, *Jordan Dam Construction Report* (Jan. 20, 1929), 89.

[256] Mentioned as shown on drawings A-22849. (non-extant).

[257] Referred to as Drawing C-11866 (non-extant?) original structure, and C-34572, wing added.

"Jordan Dam School House & Pupils," clearly shows a side entry with two doors. This agrees with the plan drawing, so the photograph may indicate that the addition was placed on the side of the Community Hall; however, another photograph, which appears to be dated January 1, 1931, gives no indication of the structure being an addition to anything at all. Is the later photo of a different school building? A gap in the written documentation may indicate an oversight of the chronicler or a page may be lost that would illuminate the question.

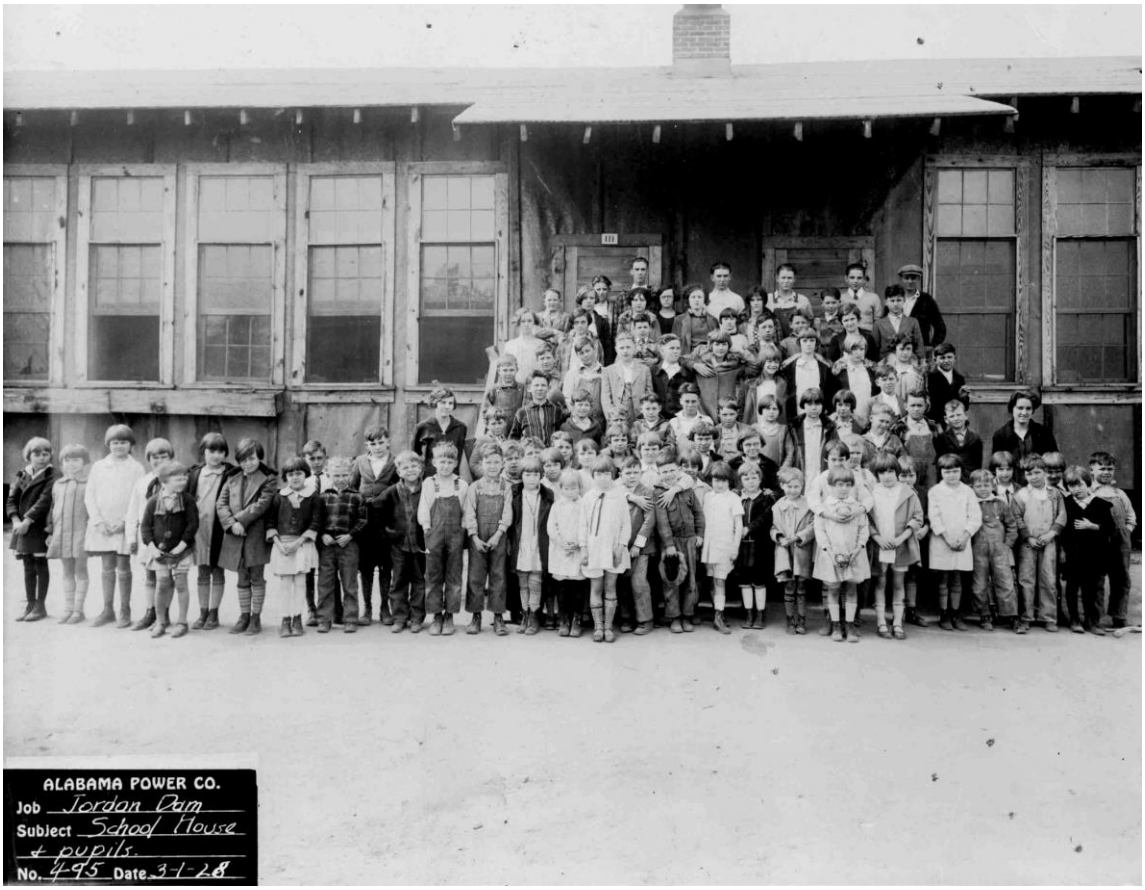


Figure 4.10 Jordan Dam School Students, 3-1-1928.

Figure 4.11 Lock 18 (Jordan Dam) School House, 1-1-1931.

The differences in the schools may be related to how many students were to be taught in the camps. For instance, the White schoolhouse at Martin Dam, where the number of total employees was 1800 and an expected high population for the camp was 3000,[258] was divided along the middle of the long sides to form two equal spaces for classrooms with 42 desks in each room (Figure 4.12).

[258] H. A. Powell, "Cherokee Bluffs Notes," *Powergrams*, September, 1923, 14.

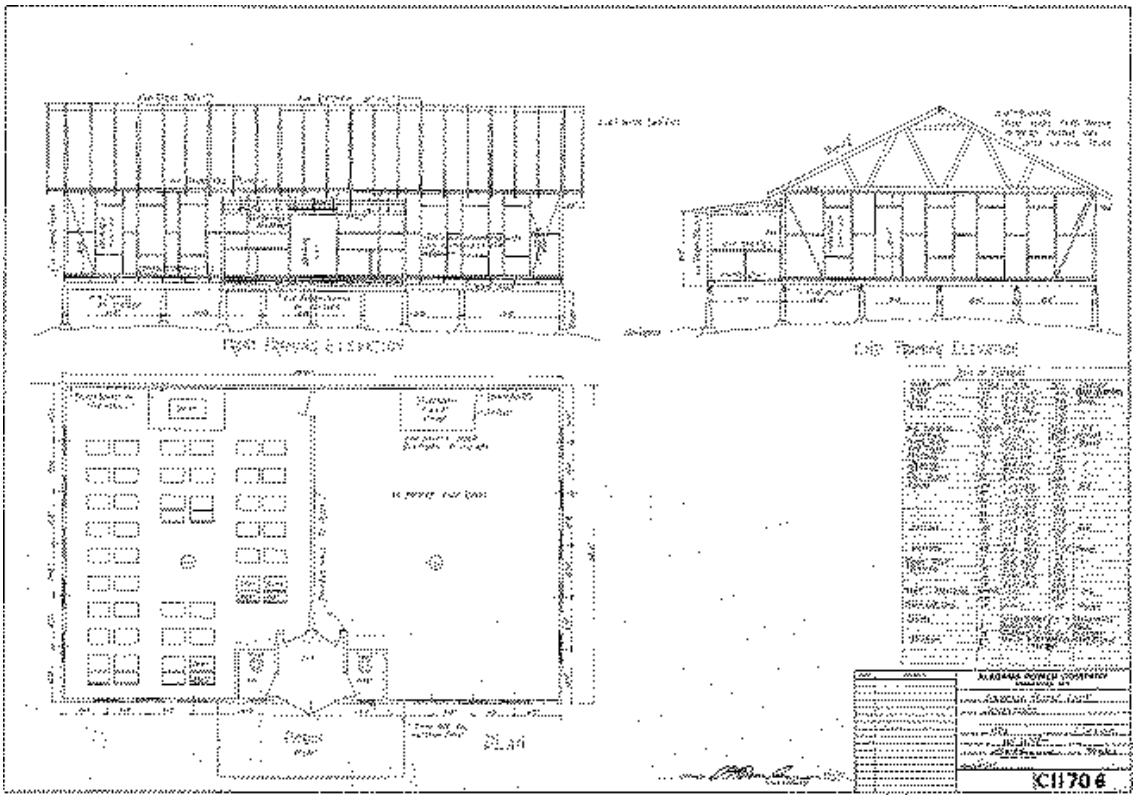


Figure 4.12 Martin Dam Schoolhouse 9-19-1923.

Also, in each room, there was one toilet (opening to the vestibule at the porch entry) and a raised platform for the teacher's desk. A blackboard covered the entire length of the wall behind the teacher's desk, so there were no windows along this wall, meaning that any cross-ventilation from the many equally spaced windows was across the corners of the room and, therefore, not as efficient. In the centers of both rooms was a wood-burning stove for heat in winter.

This school was evidently planned for 84 students, which seems crowded when compared with the schoolhouse extension at Jordan Dam. The Jordan Dam schoolroom created by the addition was smaller than each half of the Martin Dam school, and it had only 16 desks. One way to compare these two schoolhouse spaces is by square foot

dedicated per student. Based on square footage per desk, this is 40.5 square feet per desk at Jordan Dam versus 21.26 square feet per desk at Martin Dam. This seems likely one of those things learned by trial and error as Jordan Dam was constructed after Martin Dam. If families moved from one job to the next with the construction bosses for whom they worked at previous jobs, the parents may have complained about the lack of room in the Martin Dam School. However, if they did, it is not recorded.

Although the plans call for porches at the gable ends at Jordan Dam, it appears that the local decision was for the entry to be placed along one long side of the structure, and then the change of configuration was repeated (this time planned that way) at Martin Dam to better fit the site (Figure 4.13). Plans were drawn up in the Birmingham office where a cadre of trained draftsmen assisted engineers and architects in the creation of plans for the several construction projects underway at the same time. Often these generic plans were adapted to the needs of the site by the foreman and his workmen in the field, as necessary, and reported back to the main office. Going forward the draftsmen adapted the plans to represent these changes, and they might be changed again should site conditions warrant. In this feedback loop, the Dixie Construction Company and the APC evolved the most efficient strategies for the next round of construction at the next site.

Figure 4.12 Cherokee Bluffs School, Martin Dam, 11-1-1923.

Schools for the Black children typically were also used as the church in the APC camps (Figure 4.14). In part, this was a cost-saving measure, since the Black workers were not expected to remain in great numbers after the construction of the dam and powerhouse was completed. Although the structure was perceived as temporary, the construction standards were the same as the other camp buildings because, by standardization of the building materials, costs were kept lower. The Black school did, however, have one improvement that probably made it more comfortable than the White schoolhouse, in the form of a passive cooling system resulting from the inclusion of the louvered steeple placed near the gable end. At the opposite end of the building, the gable held one-louvered opening that should have created a nice cross-current as the ventilation of the heated air rising through the steeple was sure to make it draw in fresh air. The White school at Martin Dam had one louver at each end, but these were placed at the

same heights, so they would not have had quite the same salubrious effect. The heat must have been much more noticeable in the White schoolhouse; although these schools were placed in the shade of trees, the trees are sparsely scattered. At the Jordan Dam Community Hall (Figure 4.15), the image shows a long louvered vent (the ventilator) running along the roof peak to draw air up and out the top of the building, but the schoolhouse addition appears to have no provision for ventilation of this type. It can be argued that the schoolhouse looks like a schoolhouse while the Community Hall does not. Unfortunately, we do not have the rationale behind differentiating these two typologies.

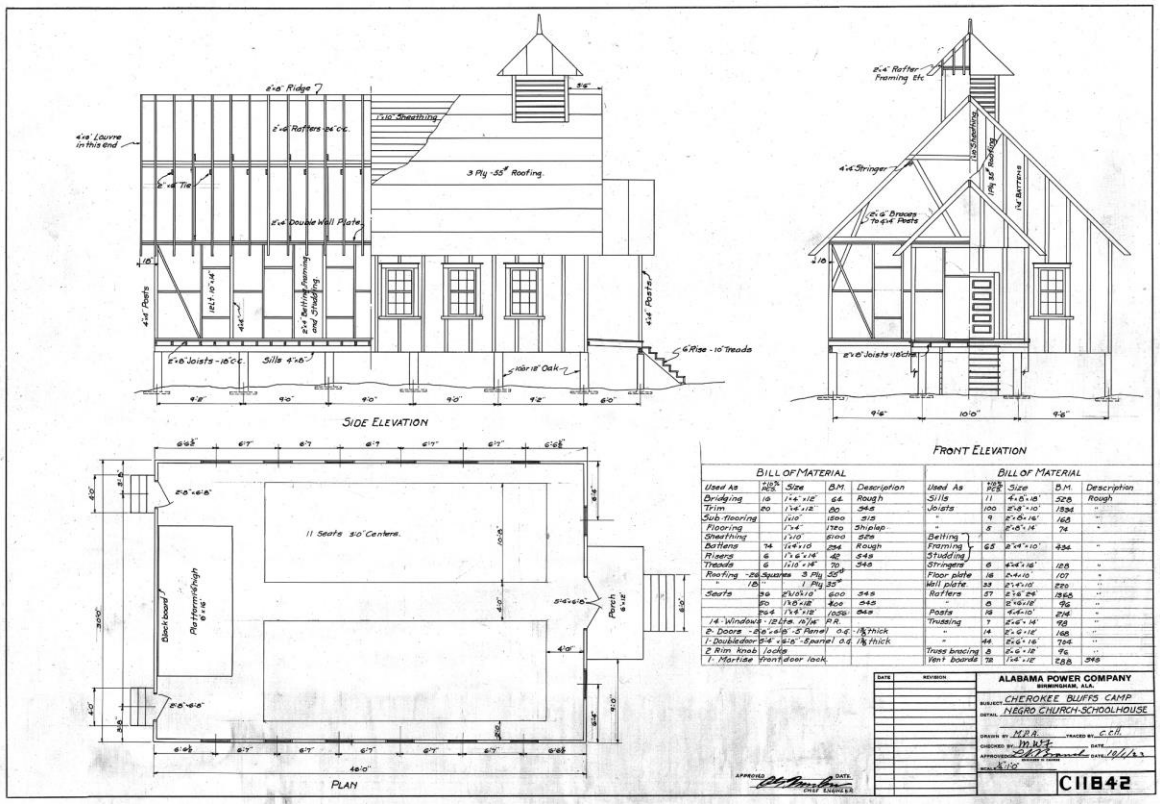


Figure 4.14 Martin Dam, Negro Church and Schoolhouse, 10-1-1923.

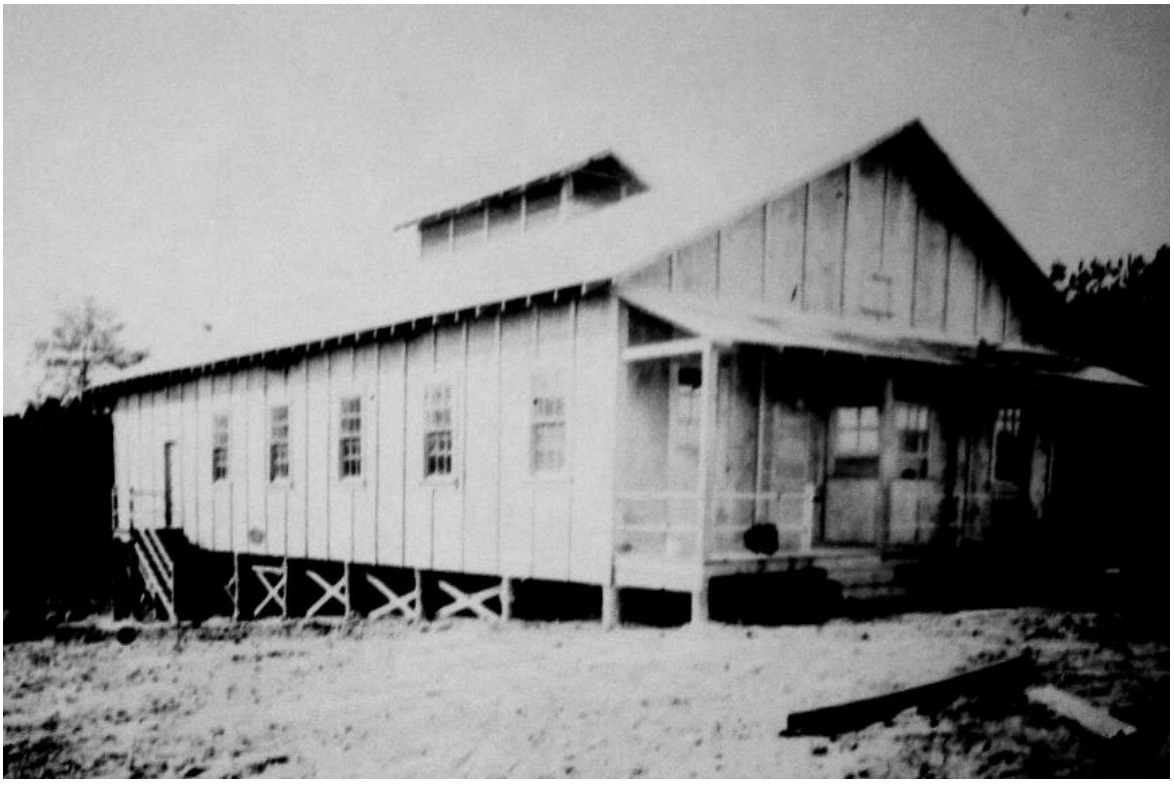


Figure 4.13 Jordan Dam Community Hall, 1927.

The Black school/church at Martin Dam did not have any indoor plumbing, so no space was devoted t&&o lavatories, or cloakrooms, for that matter. There is no indication of the provision of heat, but a good cross-ventilation is provided by the six-over-six windows regularly spaced along the two long walls. Desks were not provided, but the drawing legend calls for “11 seats 3’0” on centers” in each of two rectangular areas with an aisle running between them on axis from the double front doors to the raised platform for teaching or preaching. The wall behind this platform was also covered with chalkboard, except for two doors leading to exterior stairs with no landings. The space is difficult to reconcile with the desks of the White schools, but even if we figure only five children sitting on each bench (24” per child), that is 110 students in the room. Setting aside the difference in the sizes of the teacher’s space, this gives a per child ratio of 12.55

square feet each and no surface upon which to write. The lack of working surfaces demonstrates the prevailing idea that Black children had no need of schooling beyond the simple reading, writing, and arithmetic they would need for purchasing groceries and staples at the company store or understanding their paychecks. However, this is simple speculation as no records of the number of students, their ages, or what was taught were found.

4.2 Hospitals

The very first problem in the prosecution of the work that first presented itself was the building of camps and the providing of necessary messes and quarters for the men and houses for their families. It was realized that unless proper food and comfortable habitations were provided, it would not be possible to hold the men. It was anticipated that a very large force would be necessary to complete the work quickly and on time and that with such a large force, the sanitary and medical end of the work would need strict attention and be no small problem in itself. It was essential that no contagious or infectious disease be allowed to gain a foothold and sweep through the camps, seriously hampering the work and giving the job a bad name.[259]

This excerpt from the Executive/General Manager's File at Lock 12 Lay Dam speaks of the concerns of the McArthur Brothers management for the work that would be done by the APC in the future. McArthur Brothers had much experience in large industrial construction projects, one reason the APC chose them to perform the work at

[259] McArthur Brothers Construction Company, "Section 'B' Methods Adopted for Handling the Work and Materials Used in the Work – Camps – Railroad _ Layout and Description of Contractor's Plant at the Dam and Quarries – Storage and Care of Materials – Inspections," *General Manager's File: History of Construction of Lock 12 Dam and Foundations – Coosa River*, no date, 29.

Lay Dam, but they were also expensive and their labor force unused to the Alabama heat and humidity. When the APC formed the Dixie Construction Company to perform the rest of the work on the power plants for Alabama, they incorporated most of McArthur Brothers' suggestions and procedures; one exception was hiring local men accustomed to the local weather to do the work. The APC shared the conviction that the employees would have to be healthy to do productive work.

Unfortunately, McArthur Brothers either did not document the work at Lay Dam to the detail maintained by Dixie Construction Company, or the documents were not retained by the APC. Little can be ascertained about the provisions for employee health at Lay Dam, but the need for a hospital and first aid facilities was anticipated. The discussion of the hospitals for employees of the APC, therefore, begins with Gorgas.

What we will see is an evolution over time in the way the spaces are laid out and used. The changes point to evolving ideas about hospitals in larger cities and knowledge gained during WWI. Noting that not many architectural historians had studied hospitals, Annmarie Adams found in 1999, "Generic hospital architecture of the interwar years *was* modern in its spatial attitudes, not necessarily its look but rather its structure, its endorsement of aseptic medical practice, its sanctioning of expert knowledge, its appeal to new patrons, its encouragement of new ways of working…its use of zoning, its acceptance of modern social structures…and its endorsement of standardization."[260] The APC hospitals began to reflect these modern trends with the construction of the Mitchell camp hospital in 1921.

[260] Annmarie Adams, "Modernism and Medicine, the Hospitals of Stevens and Lee, 1916–1932." *Journal of the Society of Architectural historians,* March 1999, 45. Downloaded from JSTOR, December 3, 2019.

Plans of interwar hospitals included smaller rooms opening onto long double-loaded corridors, but the features of pavilions or wards for poorer patients (called public wards) were typically smaller than their nineteenth century precedents. (Private accommodations typically were only for the most contagious patients.) The designs focused on how to balance the economy and efficiency of the ward with the comfort and protection of the private room.[261] Because these were camp hospitals not located in large cities where wealthy patients might be able to pay extra for private rooms, the hospitals in the camps typically consist of wards opening off double-loaded hallways with sunrooms at the ends. There were, however, a few private rooms that were used to isolate contagious patients. The fear of an epidemic was very great in the camps.

Good health was still related in a real way to traditional values through the symbols of home and the values associated with traditional architecture. Hospitals relied on the likeness of the big, safe house to convince middle-class city dwellers that their chances were as good there as at home, especially to those who might pay much-needed extra fees for semi-private or private accommodation.[262] The APC hospitals were designed to blend in well with the prevailing vernacular style of the local camp architecture, dressed up only a bit to show the importance of the care given by the medical doctors and their staff.

4.2.1 The Hospitals at Gorgas (Gorgas purchased 1914, construction 1916–1923)

In July 1924 an article appeared in the APC employee newsletter, *Powergrams,* informing employees that the existing Gorgas hospital was being raised so that several

[261] Adams, 51.

[262] Adams.

rooms could be added to the ground floor as part of a complete renovation of the old building that would provide "adequate and sanitary accommodation for any emergency."[263] A new set of "cement steps" was added to make the entrance more accessible to workers coming from the upper camp, and a road was graded to better connect the hospital with the main camp. Cheerily optimistic, the unnamed writer adds that when the "alterations are complete, we will have the finest camp hospital in the county." The physician in charge of Gorgas at this time was Dr. McDiarmid, who with his wife had recently relocated from Gadsden, Alabama.[264]

These unattributed and undated images of the old hospital under re-construction (Figures 4.16 and 4.17), show a multi-level structure inserted into a steep hillside so that entries can be located at ground level for both floors, a true time, pain, and labor-saving strategy when stretcher bearers might otherwise have had to climb stairs, jostling and further injuring a victim.

[263] "News from Gorgas," *Powergrams,* July 1924, 31.

[264] *Powergrams*, July, 1924, 31.

Figure 4.14 Gorgas hospital under renovation, upper level, undated.

Figure 4.15 Gorgas hospital under renovation, lower level, undated.

The two images indicate the condition of the rear of the building before the renovation was undertaken and the upgrades underway on the upper level at the front of the hospital. The hospital appears to have been repainted, but it is not clear how much of the structure was being improved or where these improvements occurred. It also appears possible that the materials used to construct the addition at the rear of the hospital may have been relocated from another structure, since sometimes building materials, or even parts of buildings, were re-purposed when available. Here, the roof of the addition merely needs to be attached to the sloped roof portion of the old hospital and a connecting hallway added to both floors. No mention of this process was found in the construction narrative, however, nor are there interior plan drawings.

The newly renovated hospital was completed with a driveway leading directly to the front steps (Figure 4.18). Retaining walls were placed to keep rain from washing out the hillside and to lend privacy to an entrance on the ground floor where new employees were checked for health problems or contagious diseases such as malaria. The upper levels were reserved for recovering employees (Figure 4.19). The separation of spaces helped control the spread of infection and diseases brought in by new job applicants.

The plan drawings for the camp layout of 1918 show the hospital was located mid-way between the workplace and the residential area for non-permanent workers (Figure 4.20), but set off behind the houses lining the main road.[265] The refurbished old hospital had not been much more than a doctor's office and clinic/infirmary. It was not capable of handling large numbers of sick or injured, and the equipment was inadequate for much more than first aid. More problematic was the isolation of the Gorgas plant and

[265] *D6655*, 1918, Drawing, APC Archives.

that the victims of serious accidents or illnesses had to be transferred to a hospital in Birmingham for treatment; sometimes a two to four-hour wait for proper care resulted even for emergencies.

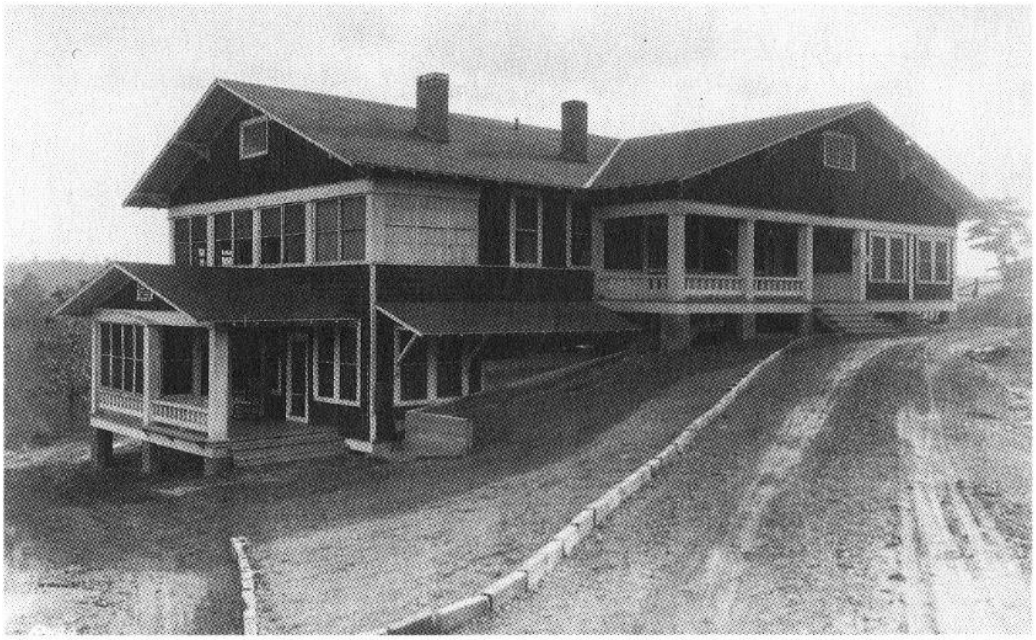


Figure 4.16 Gorgas Hospital after renovation, no date.

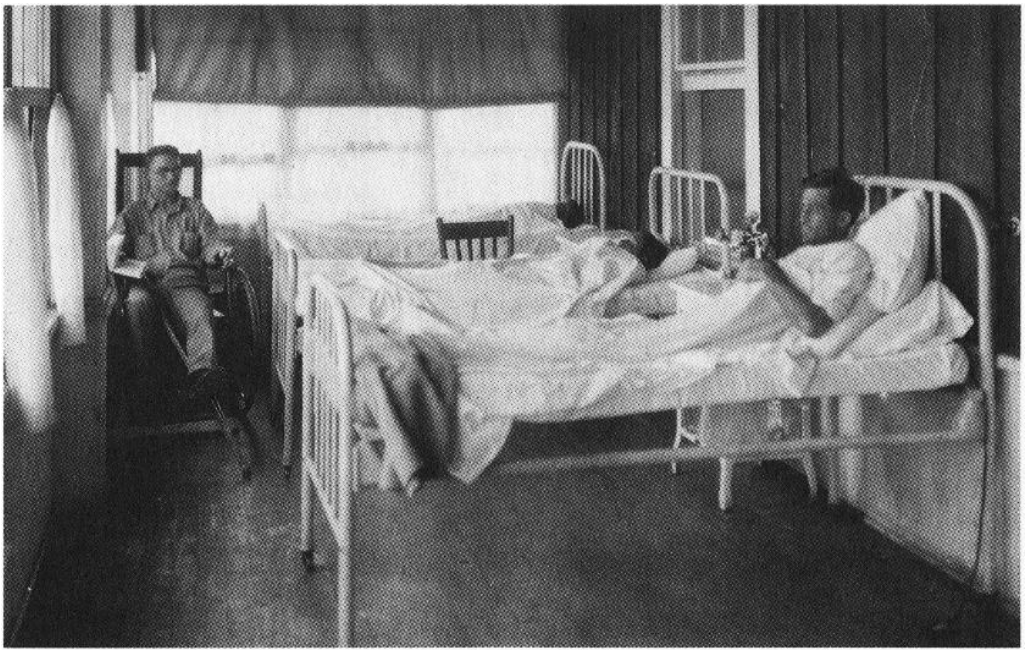


Figure 4.19 A room in Gorgas' first hospital, no date.

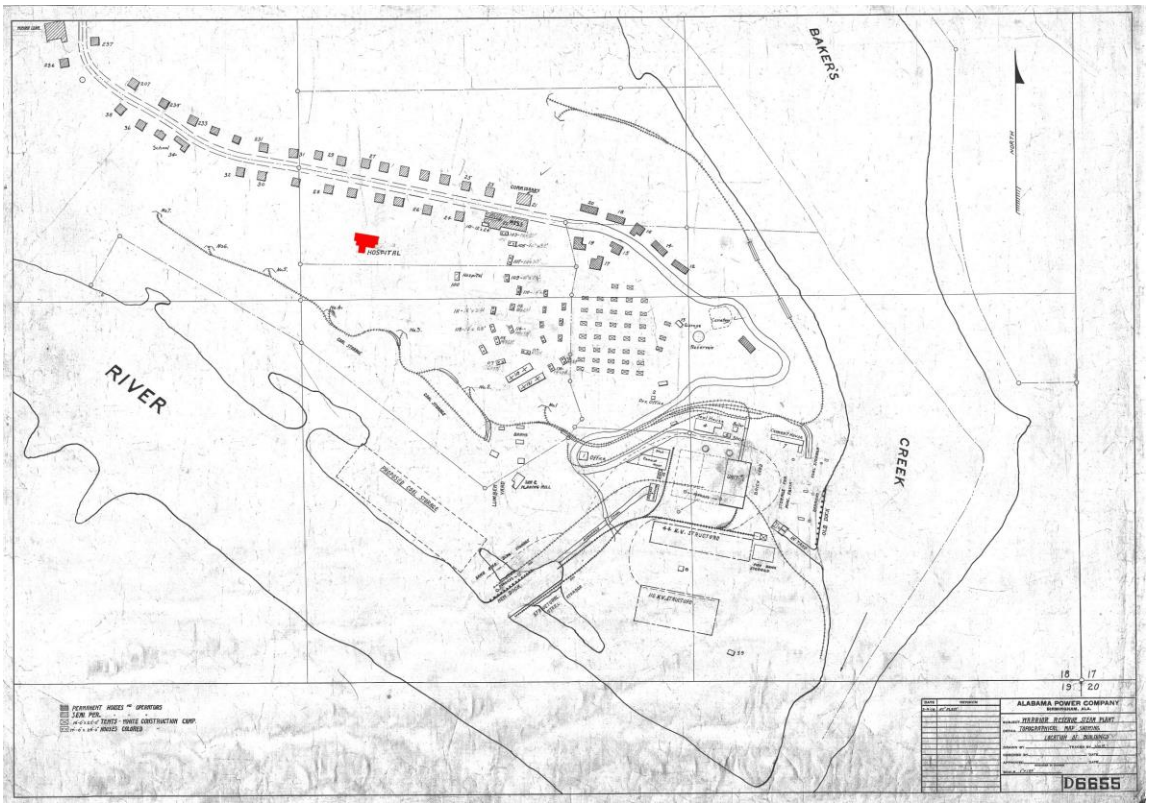


Figure 4.17 Gorgas Camp Layout, 1918. Hospital shown in red.

In March 1925, the opening of a new hospital was announced in *Powergrams* (Figure 4.21). This event had taken place on February 25, 1925, on the first anniversary of Dr. McDiarmid's arrival at Gorgas. According to the writer, the new hospital was redesigned for efficiency and ease of operation with a four-room apartment for the doctor and his family on the lower floor so he could always be available when needed. Also, on the lower floor were three wards: two accommodating four patients each, the third three patients, a storeroom, a bath, and the furnace room. On the upper floor, there were three wards that could accommodate seven patients (two, two, and three – or a total of twenty-one? This was not made clear), and "a nurse's room, diet kitchen, two bathrooms, office,

operating room, supply room, and first aid."[266] A plant adjacent to the building, which was designed at the camp and approved by the resident surgeon, provided steam heating. Because the Gorgas plant generated electricity with coal-burning boilers, steam heat was the technology of choice. Although Edison had invented an electric heater in 1893, the advent of a true electric heating system had to wait until a reliable and safe radiant heater was perfected in the years after World War II.[267]

Figure 4.21 The New Gorgas Hospital in 1928.

A low-pressure steam system heated the building at Gorgas. This was not a direct byproduct of the boilers that produced electricity at Gorgas, but the technology was a familiar one, and coal was supplied from the stockpiles for the steam plant. (All-electric heating and kitchens would be explored at the other sites.) Gorgas was also planned for

[266] *Powergrams*, March, 1925, 17.

[267] AAA Heating and Cooling, Inc., accessed Jan. 17, 2019. https://www.aaaheatingandcoolinginc.com/the- history-behind-home-heating-systems/ and https://www.aaaheatingandcoolinginc.com/the-history-behind- home-heating-systems/.

the addition of more boilers over time, meaning that the construction phases were repeated each time with Black men working as laborers. Recognizing the repeated necessity of providing for this portion of the labor force, the APC adjusted the standardized plan to accommodate them.

The old hospital at Gorgas had served its purpose for a number of years, but its location and size were inadequate for the needs of the camp that grew in population as additional units came online. Another new hospital was planned when DCC employees further swelled the ranks as the construction of an additional generating plant progressed. For this new hospital, a more convenient location affording better arrangement of spaces was found based on the experience of the APC at other construction sites. The hospital was of the same five-part design employed at the other camps. Although there is considerable variation in the style of the façade, the materials are generally the same in all locations (i.e., lumber purchased from local sawmills or milled on-site from the trees harvested to construct the dam and impoundment). The walls were painted a cream color set off by a dark green stain on the woodwork. The stained woodwork was an innovation here used for the first time to avoid the problem of White doors becoming discolored by the hands of staff and visitors; ample closet space and stronger floors were provided as a result of the needs demonstrated in the past at other company hospitals.[268]

At Gorgas, the new hospital was set on a level site on top of a high hill with an open park-like setting among a thin cover of tall hardwood trees, affording an attractive view in all directions (Figure 4.22). Typical of most of the other camp hospitals, the site was selected for the slope to the rear, which allowed for a basement entry on ground

[268] "The Gorgas Hospital," *Powergrams,* September, 1928, 16.

level. A triangular pediment, supported by doubled squared piers at each end, sheltered the central entry of the upper floor of the hospital at ground level. The end pavilions were gabled in proportion to the smaller central bay but were fronted by deep decks with wide doorways that allowed the patients to be rolled outside on their beds to take the sun in mild weather.[269] The cadence of the doubled windows across the central connecting rooms and the inner sides of the end pavilions was balanced by two single windows flanking a double doorway at each end of the building. Cross rail fencing gave a sense of style to the otherwise rather unremarkable building, but it is inviting in the image below, a little plain like the company homes, but its embracing arms seem just right for a camp hospital. The brick smokestack of the power plant can be seen in the distance behind the hospital's central façade.

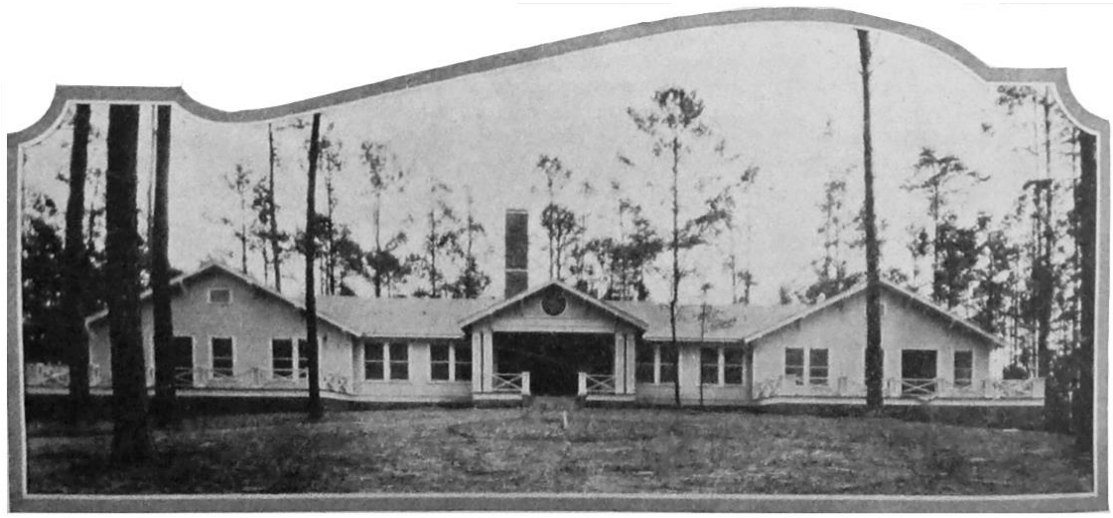


Figure 04.18 Gorgas Hospital, 1928.

[269] *Powergrams,* September 1928. The healing powers of the sun and fresh air were recognized to be beneficial since it was felt that the rays of the sun killed bacteria and germs.

The end pavilions were ten-patient wards each with "lavatories, baths, and all conveniences."[270] The doctor's offices, consulting and treatment rooms, labs, a storage closet for drugs and supplies, and a specially built sink to be used in the preparation of medicines and injections were all located in the central portion near the entrance. The operating room was in the rear of the central portion and was equipped with the latest in medical technology including an X-ray machine and sterilizer. A wing in the rear housed colored patients, and the all-electric kitchen was designed to prepare special diets for the patients. Private rooms were provided for both White and colored patients in their separate areas.[271]

What was in the connecting portions of the hospital? This was not discussed in the *Powergrams* article, but a comparison with the drawings for the earlier and somewhat similar Cherokee Bluffs hospital shows a different layout. (The Cherokee Bluffs hospital dated from 1923, and the New Hospital at Gorgas was constructed five years later.) At Cherokee Bluffs, there is a separate but equal symmetrical plan where at Gorgas we have been told the Black patients were served in the rear of the hospital. The central portion at Cherokee Bluffs was more compactly arranged and the porches are enclosed,[272] which seems an improvement over the Gorgas plan. Why was the layout done differently at Gorgas? It is most probably because the Gorgas Hospital served more Blacks. At Cherokee Bluffs, the permanent operators were all White, and there were only a few

[270] *Powergrams,* September, 1928.

[271] *Powergrams,* September, 1928.

[272] See drawing C11903 for Cherokee Bluffs/Martin Dam, dated 10-16-23. APC Archives.

Blacks permanently employed maintaining the grounds and doing other more menial tasks, but at Gorgas there were many Black men employed in the coal mines.

By the time of its opening, the hospital was already running at full capacity since it handled patients from the DCC, APC, and Southeastern Fuel Company and their families at Gorgas as well as non-company patients sent from the surrounding area.[273] A room inside the old Gorgas Hospital appears to have been posed for this image (Figure 4.23), with one bed blocking a door.

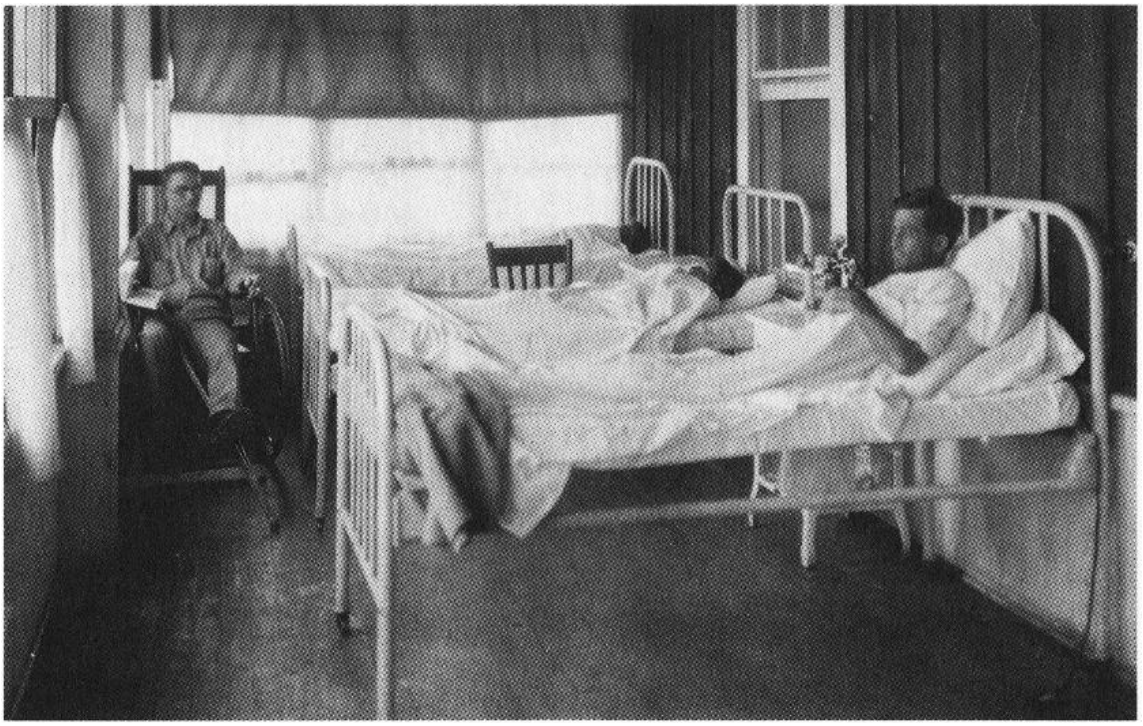


Figure 4.19 A room inside the old Gorgas Hospital. No date.

[273] "The Gorgas Hospital," *Powergrams*, September, 1928, 17, and *DCC Annual Report of 1927*, 31. The anonymous writer described the staffing: "The staff consisted of the surgeon in charge, an assistant surgeon and colored nurses and orderlies (one for day and one for nighttime duty), supervised by a White graduate nurse who directed all hospital activities with a 'colored' graduate nurse as her assistant during the day and another for night duty. A cook and a kitchen boy were employed along with special nurses drawn from the nearest hospitals (in Birmingham) 'as conditions demanded.'"

The company surgeon had responsibility for educating the camp inhabitants about safety and sanitation and training the men in resuscitation. In August 1925, an instance of resuscitation was noted in *Powergrams* under the heading, "Life Saved." A Black worker named Dave Cunningham (actually an employee of the Drifton Coal Company, a subsidiary company working on the site), was revived after ten minutes of artificial respiration performed by A. Busby and Jim Logan (both White). Dr. Diarmid noted the patient was a little dazed, but his condition was good, and it was only twenty-five minutes after the accident that Cunningham was put to bed in the company hospital to further recover.[274] The speed with which Cunningham was admitted was improved by the short distance from the accident site to the hospital. Employees of the APC paid a monthly health fee that covered them for any illness or accident, a rudimentary type of insurance that protected their families as well. The same courtesy seems to have been extended to Cunningham without the need for an individual insurance policy, and *Powergrams* was able to print a slice of life story that made for good public relations.

After construction of the new hospital, the old building was cleaned up and repaired for use as a bachelor's quarters by the DCC. This took place by August 1928, at the same time painting was being completed on the new hospital.[275] By September 30, an all-wood water tank to furnish a dependable water supply was begun and completed, and repairs to septic tanks for the hospital and some permanent cottages were made.[276] In

[274] *Powergrams,* August, 1925, 31. Perhaps the APC was concerned for a lawsuit, but it is more likely that this was the only option since another hospital was far away in Birmingham. Employees of the APC paid a monthly health fee which covered them for any illness or accident, a rudimentary type of insurance that protected their families as well.

[275] *DCC Monthly Reports* (August 31, 1928), sheet "A."

[276] *DCC Monthly Reports* (September 30, 1928), Sheet "A."

December 1928, the DCC Reports cited further alterations to the hospital, but the work was being done "piecemeal" because there was a shortage of labor at the time. In December the hospital showed a profit of $2584.67.[277] The hospital at Gorgas was less ephemeral than at the other sites discussed in this paper since there were frequent upgrades and additions to the power plant at Gorgas, meaning a larger population, over a longer period of time, which had to be served by the company hospital.

4.2.2 The hospital at Mitchell Dam (1921-23)

At Mitchell Dam, about 14 miles downriver from Lay Dam, the hospital facilities were built from scratch, the site having no pre-existing structures to convert into new uses. In fact, the site was on one of the "wildest sections of the river" and "barely accessible" to the outside world.[278] Because everything had to be brought in on roads cleared and built through the forest by APC crews, great care was taken to design the hospital so that additional space could be added if an emergency situation were to arise.

It was first decided that a hospital providing fifteen beds per one thousand patients was more than necessary although the standard ratio called-for twenty-three beds at this camp. Even when the camp workforce was at maximum employment (the total population at that point was around 2000), the hospital was planned for only fifteen beds, which proved to be inadequate at times.[279] Provisions for expansion were implemented in the winter of 1921–1922 when twenty-eight patients were cared for in the hospital during an influenza epidemic. On average, however, the number of inpatients was around fifteen to

[277] *DCC Monthly Reports* (December 1928), 7.

[278] Jackson, *Rivers of History*, 184.

[279] L.V. Branch, "Construction of Mitchell Dam," *Powergrams*, December, 1923, 12.

eighteen, so the projection of fifteen beds was not so far off the mark.[280] Dr. Benedict, the Chief Medical Officer for the APC, described the new hospital as free to all employees and their families, including all services; this included medical service, beds, meals, attendance, X-ray, and lab work, in short, anything that could be obtained at a regular hospital in towns like Montgomery or Birmingham.[281] This is important since the camp was so far removed from up-to-date hospital service in both distance and ease of transportation. Emergencies had to be dealt with at the camp because any attempt to transport an injured worker long distances over the rough unimproved roads might have been a death sentence.

The images of the sterilizer (Figure 4.24) and the hospital exam table (Figure 4.25) give a clue to the interior finishes. Walls are painted and joints in the wall panels appear to be battened with wooden strips. The color is very light, probably White to ensure cleanliness. The verbal description given by Dr. Benedict is very similar to the floor plans for the hospital at Cherokee Bluffs/Martin Dam drawn in October 1923. Since there are no remaining drawings for the Mitchell Dam hospital, we can compare Benedict's description to the plans for the Cherokee Bluffs/Martin Dam hospital (Figure 4.26), built only a few months later. (There are only a couple of photographs and these differ so much that it is difficult to know whether there were two versions of the hospital or if someone simply mislabeled a photograph.) Because Dr. Benedict was not an architect nor a builder, his description was less particular about the placement of spaces in

[280] Dr. S. R Benedict, "Our Hospital at Mitchell Dam", *Powergrams,* May, 1922, 1. Dr. Benedict frequently wrote reports on the APC hospitals' activities along with general interest topics ranging from "What to Have in Your Medicine Cabinet" to "Don't Kill Mad Dogs."

[281] Branch, "Construction of Mitchell Dam," 2.

relation to each other. However, he did mention a dumbwaiter, which would imply that at Mitchell Dam the hospital was indeed placed so that there were two levels. He later remarked that there was a "main floor," so the Mitchell Dam hospital had at least two floors. This precedent must have come from the given situation at the Lay and Gorgas camps because it worked well for the separation of duties and afforded the nurses a way to screen job applicants for communicable diseases without them coming into direct contact with the sick or injured. It also provided space for the kitchen, storage, and boiler for the hospital's steam heat. The spread of disease was extremely feared in the camps.

Figure 4.20 Mitchell Dam Sterilizer.

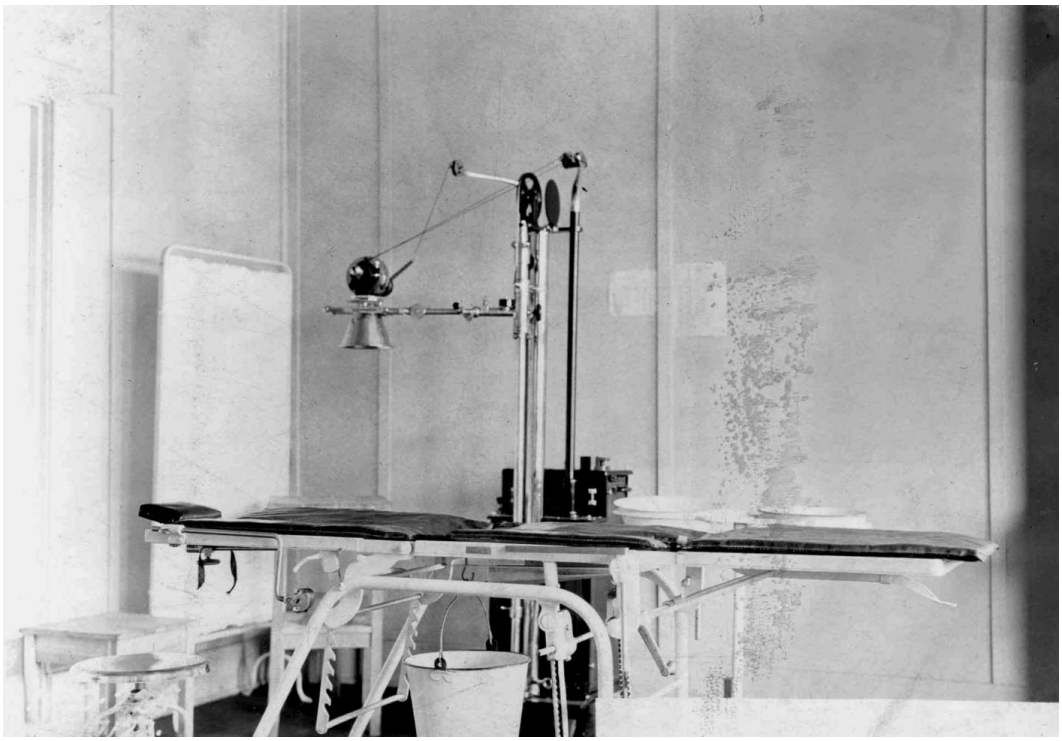


Figure 04.21 Exam Table with X-Ray Machine at Mitchell Dam.

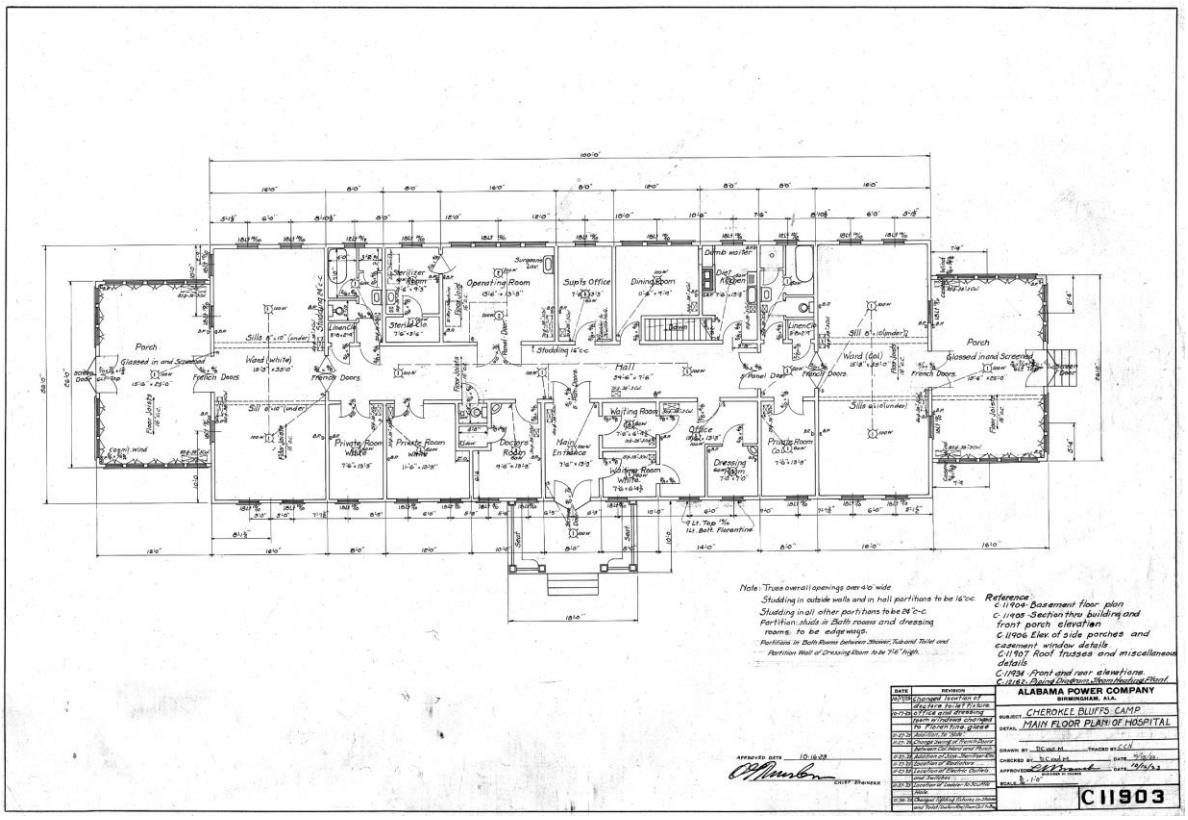


Figure 4.22 Cherokee Bluffs/Martin Hospital Main Floor Plan, 10-16-1923.

The science behind the transmission of diseases was not well understood at the time, and treatments were not particularly efficacious. Dr. Benedict described the provision for contagious diseases at the Mitchell camp as a "specially constructed tent that is located sufficiently close to the hospital" that meals could be delivered easily.[282]

The Cherokee Bluffs and Mitchell hospitals set the standard for APC hospitals. Taking what worked best from the pre-existing hospital at Gorgas (in particular the two-level organization) and the standard APC practice of dismantling hospital equipment for

[282] Branch, "Construction of Mitchell Dam," 2.

use at the next construction site, these new hospital plans allowed the engineers and draftsmen to merely adjust and adapt the generic plan to other site conditions.

As if he were walking through the hospital in his mind, Dr. Benedict related that the location of the Mitchell Dam hospital was on the crest of a high hill so the two-story form seems logical. The site of the hospital was described as being on the highest point of the ridge nearest the dam above the twenty-four permanent houses.[283] Benedict began with the White patient side of the building; "the interior consists of two private rooms for White women and two airy wards for White men. This section also has a large screened porch where patients may rest and recover in the fresh air."[284] The plan for the hospital at Cherokee Bluffs shows a seven-and-a-half-foot wide central hallway running the length of the hospital, with accordion doors opening onto the wards, which lay across the hallway from one another and another set of double doors opening to the sun porch, which was "glassed in and screened."[285] The fresh air was known to be conducive to a speedier recovery by Dr. Benedict, who was actively involved with the national medical associations and, therefore, up to date on the latest medical practices.

Benedict's next descriptive passage is a bit disorienting vis-à-vis the plan for Cherokee Bluffs since he has evidently gone downstairs in his mind. Again, a comparison with the plan of the hospital at Cherokee Bluffs/ Martin Dam is useful (Figure 4.27). "Next comes the laboratory," said Benedict. At Cherokee Bluffs, the lab was placed on the ground floor, below the wards. This lab was equipped with everything needed for

[283] Branch, "Construction of Mitchell Dam," 12.

[284] Branch, 12.

[285] Branch, 12.

blood testing, had the most modern x-ray machinery, and was operated by a "thoroughly trained technician."[286]

On the main floor plan (Figure 4.28), the opposite wing upstairs was for the Black workers and their families. This was a mirror image of the White wing as far as the wards and porch are concerned. The wards were labeled as one for Black men and one for Black women on the plan, and there was only one small private room (corresponding to the small one at the White end); the other space was given over to an office and dressing room. Both wings had a fully equipped bath and linen closet that served both genders. While the small private room in the Black wing is shown on the Cherokee Bluffs plans, it is not mentioned by Benedict at Mitchell. In the center of the building is a smaller "main" porch in the center of the building's front façade. The one at Cherokee Bluffs is 10'- 0" by 18'- 0" and contains built-in benches that run from the wall on each side, turn the corner, and frame the opening at the stairs. These must have been used as an alternate waiting area for overflowing patients or for families waiting to hear news of their loved one.

[286] Branch, 12.

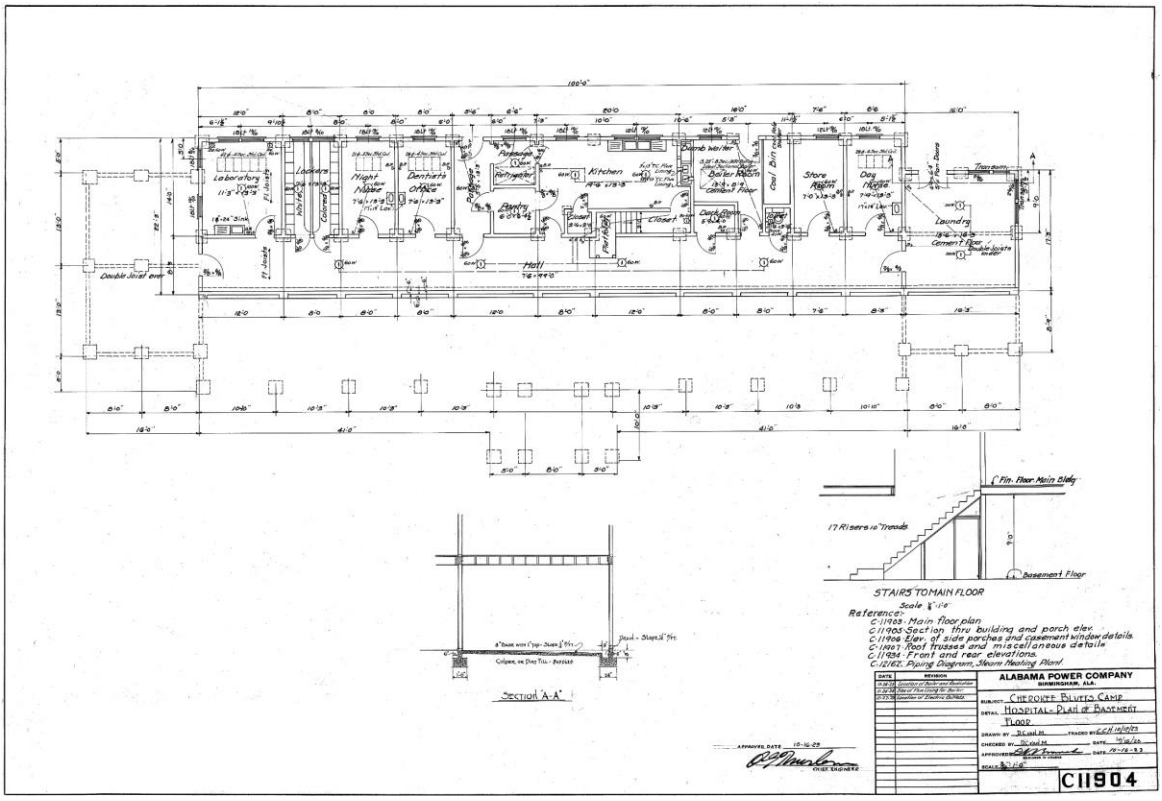


Figure 4.23 Basement Floor Plan Cherokee Bluffs Hospital, 10-16-1923.

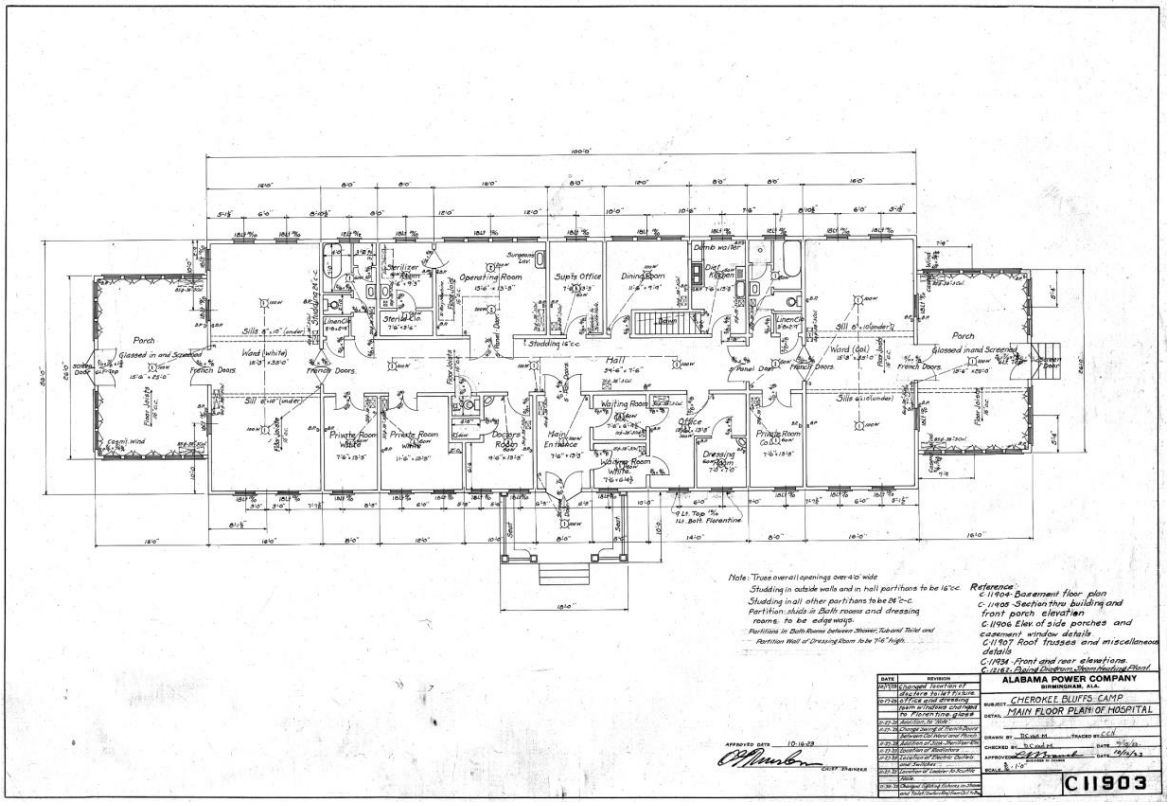


Figure 4.24 Cherokee Bluffs/Martin Hospital Main Floor Plan, 10-16-1923.

At Mitchell, the doctor's office was described as being immediately inside, as was the clinic, with two waiting rooms (one for Blacks and one for Whites), and then across the hall were the operating room and the sterilizer room, both furnished with all the most up-to-date equipment, including electrically operated sterilizers. The dining room and diet kitchen were also located on the main floor, served by a dumb waiter to send food from the main kitchen to the diet kitchen from whence it was served. This description matches well with the plan from the Cherokee Bluffs Dam hospital. Both buildings are steam-heated and electricity powers most equipment and the lights. Adjacent to the dumbwaiter in the Cherokee Bluffs plan was a double-flue chimney that vented the stove and the

boiler in the boiler room next to the ground-floor kitchen. The chimney can be seen in the photographs of the structure.

Although there is no extant plan of Mitchell Dam's hospital, we can be certain that if it differed from that at Cherokee Bluffs, the differences were very slight. Did Dr. Benedict simply fail to mention the one private room for Black patients, the dentist's office, laundry, and the supply and storage rooms as he did not think them important (or perhaps he did not visit them), or were these spaces not included in the hospital at Mitchell? The description of the Cherokee Bluffs hospital by Benedict in November 1923 indicated that the changes to the layout of the new hospital at Cherokee Bluffs included a laundry (which was not a part of the Mitchell scheme) and that the layout of the out-patient area was different. (He did not say how it was different.) He also said, "it was found advisable" to provide "private rooms for women patients and men who are seriously ill or badly injured,"[287] so these rooms were not provided at Mitchell. Because of the threat of malaria and other diseases spread by mosquitoes and flies, all doors and windows had screens, not just in the hospital, but the houses, dining hall, and public buildings too.

Besides the mere fact of segregation and thus the duplication of facilities, were Black students and patients, and so on given less space? Whether the floor area given to Whites and Blacks in each of these buildings (and building types) were similar or not can be ascertained by consulting both the plan drawings of Cherokee Bluffs/Martin Hospital and the photographs taken April 7, 1922 at Mitchell Dam (Figure 4.29). The main floor plan at Cherokee Bluffs/Martin Hospital shows a symmetrical set of rooms at either end

[287] Dr. S. R Benedict, "Power Company Hospitals," *Powergrams,* November, 1923, 14.

of the building. The White side is on the left and the Black side is on the right of the drawing.

These rooms were, from the left: a large glassed-in and screened porch with doubled storm doors leading across the porch and through French doors into a hallway running the full length of the building, through another set of French doors to another glassed/screened porch and out again through doubled storm doors. Just inside both sets of French doors were two large wards facing each other across the hall.

Next to one ward at each end was a bathroom with a shower, tub, lavatory, and toilet. (At the top in the drawing.) A linen closet opened to the hallway to the side of the bathroom. Across the hall was a private room. Both sides of the hospital were completely symmetrical to this point. The only difference in the plan is that the White side has another, larger private room. Filling the corresponding space on the Black side was the doctor's office, a dressing room, and the two waiting rooms. On the White side, there was another doctor's room where the doctor had his own lavatory and closet. A toilet (presumably for the doctor) opened to the hallway next to the doctor's room.


Figure 4.25 Mitchell Dam Hospital Corridor, 11-2-1922.

The photographs at Duncan's Riffle/Mitchell Hospital show White employees sitting up in their hospital bed and a wheelchair on the porch on April 7, 1922 (Figure 4.30). The porch appears to be screened but may not have had glass as it appears the deep overhang of the roof may have been expected to keep out driving rain, and the bed is on wheels. A photograph of the Black porch dated November 2, 1922, is clearer; it shows casement windows along the end wall and on the side wall (Figure 4.31). Three hospital beds on rollers are shown (one occupied) plus a gurney in the hallway. The photograph of the Black ward shows four Black men in various stages of illness/recovery (Figure 4.32). The space looks a little crowded and yet it looks posed by the photographer for the best

shot. A young boy stands with crutches between the three beds, where one man sits up and two are supine, but looking directly at the camera. A window shade is drawn down over the glass window, but the brightness of the day shines in underneath. Another shot identified as the Black workers' recovery room (though it appears to be the porch) shows two sitting patients and two lying in bed (Figure 4.33). The date is also April 7, 1922. The patients are attended by an orderly and a nurse (both Black) dressed in starched White uniforms. It appears to be the same area of the porch in the November image, but the ceiling light fixture has a White glass globe here, which by November must have been broken. There is only a bare bulb in November. (It is not possible to make a comparison with the White patient's porch lighting because the image does not show much of the ceiling.)

Figure 4.26 White recovery room at Mitchell Dam 4-7-1922.

Figure 4.27 Black porch wing, Mitchell Hospital 11-2-1922.

Figure 4.28 Black recovery room at Mitchell Dam 4-7-1922.

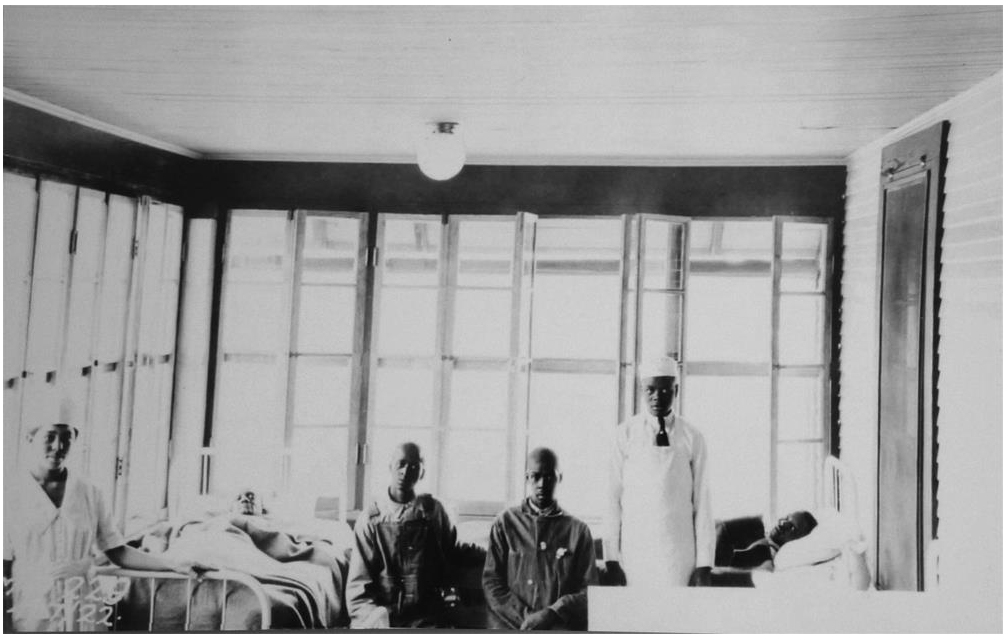


Figure 4.33 Mitchell Dam Recovery Room 4-7-1922.

A good case can be made for the equality of the space although it can also be the case that it is just easier and more efficient to build both sides symmetrically. Symmetry is evident in the front façade of the hospital. The photograph of the Camp Mitchell hospital published in the May 1922 issue of *Powergrams* shows a high- pitched gabled roof system with dormers and rolled asphalt roofing, very similar to the Cherokee Bluffs/Martin (Figure 4.34) Dam hospital. The large gable above the front porch appears to be an attempt at a half-timbered English Tudor style as does the gable at the sun porch on the near end. Also proudly pictured in the article are the electric sterilizing system and the x-ray table and camera.

Dr. Benedict took his job quite seriously. He was very proud of the record established through the efforts of the company to keep the APC construction sites free of mosquitoes like the sanitary sewers installed in the permanent camp during January 1928 (Figure 4.35).

Figure 4.29 “Our Hospital at Mitchell Dam” illustration for Powergrams article by Dr. Benedict May, 1922 issue.

Figure 4.35 Gorgas Operator’s Cottages, showing sewer line installation, 1-25-1928.

Such a good job attracted the attention of other medical practitioners. Less than fifteen years earlier, the French had been driven from the Panama Canal because of yellow fever. A party of world-famous physicians "attached to the medical division of the League of Nations" visited Mitchell Dam in the fall of 1923 to observe the methods used by the APC to keep the camp disease-free (Figure 4.36). These physicians were funded through the Rockefeller Foundation and only a few spoke English, but they were extremely interested in the fact that the APC had seeded the lake with gambusia,[288] a small minnow with a voracious appetite for mosquito larvae.[289]

Left to Right—Dr. Juan C. Segovia, President of the Board of Health, El Salvador, C. A.; Dr. Norbert Ensch, Chief of Service of Hygiene, Schaerbeek, Belgium; Dr. Norman W. Lothian, Field Epidemiologist, Health Section, League of Nations, Geneva; Dr. Amarillo H. de Vasconcellos, Rio de Janeiro; Dr. Nicholas Prigos, Athens; Dr. M. Fr. Bussiere, Director of the Bureau of Municipal Hygiene, France; Dr. T. H. D. Griffitts, Epidemiologist, U. S. P. H. S., Montgomery; Dr. Thomas Carnwath, Minister of Health, England; Dr. S. R. Benedict, Chief Surgeon, Alabama Power Company, Birmingham; Dr. G. H. Hazelhurst, Chief Sanitary Engineer, State Board of Health, Montgomery; Dr. Soper, International Health Board, Rockefeller Foundation, New York; Mr. L. C. Sims, Sanitary Inspector, Alabama Power Company, Mitchell Dam.

[288] "I See by the Papers," *Powergrams,* August, 1923, 18. APC engineer F. C. Weiss (for whom another dam was later named) constructed ponds around the lake at points that would be inundated when the water rose behind the completed dam. These ponds were stocked with gambusia which fed on the mosquito larvae and multiplied rapidly in their small ponds. When the water rose, the minnows were released into the lake where they went on to breed and multiply, thus controlling the population of mosquitoes. This was a reprint from *The Montgomery Advertiser* which originally published the article. The plan was so successful that it became *de rigueur* for all subsequent APC dams in the state.

[289] "Foreign Physicians Visit Mitchell Dam," *Powergrams,* October, 1923, 8–9. Led by Dr. Benedict, the doctors spent an entire day at the camp admiring all the newest equipment and sanitation provisions.

Figure 4.30 Visiting physicians, Powergrams October 1923.

Not only was Dr. Benedict concerned with the hospitals and patients treated by the APC doctors and nurses, he oversaw the sanitation facilities of the camps as well. In the same issue of *Powergrams* in which the foreign doctors' visit was summarized, Dr. Benedict's letter to the editor was published concerning the water supply at Mitchell. He proudly pointed out that the process for water purification was the same as that used by the Birmingham Water Works and that he was gratified to know that water samples were sent in every two weeks for testing. The tests showed the sometimes-muddy Coosa River water, drawn through the gravity filter and subjected to chlorine gas at the camp filtering station, to be "absolutely sterile."[290] The visiting physicians approved wholeheartedly of the pure crystal-clear water emanating from the taps at the camp, and "the ever-present safeguards and devices for the prevention of accidents, the arrangement of dwellings to take advantage of natural drainage, the insect-proof construction of the houses, and hundreds of other details apparent at once to the eyes of sanitary engineers."[291]

Dr. Benedict was keen to stimulate interest in sanitation among the employees of the APC along with a "desire to beautify and improve their living conditions." To this end, in 1923 he organized a "Clean-Up Week Contest" offering prizes for "the best-kept house and premises of employees" (Figure 4.37). In 1925 the prizes were won by employees living in the temporary houses; not one winner was from the finer "permanent" housing. The judges were admonished to look only at the cleanliness and

[290] Dr. S. R Benedict, "Our Hospital at Mitchell Dam," *Powergrams,* May, 1922, 2.

[291] "Foreign Physicians Visit Mitchell Dam," *Powergrams,* October, 1923, 9.

sanitation practices of the premises, not at the appearance of the house itself. In one case a tie was broken by the presence of a fly in one of the homes.[292] By 1927 prize moneywas offered to the winners of the contest, with $50 to the winner and $25 runners-up.[293] In August 1925, winners' homes were photographed and published in the company news magazine. By 1928, so many homes were scoring 100 or above, that the prize money was reduced to $10 for scores of 100 and scores above 100 received $20.[294] The Clean-Up Week contest had been a great success.

[292] Samuel. R. Benedict, "Clean-Up Week Contest" *Powergrams,* August, 1925, 1–3.

[293] "Winners in the Clean-Up Contest," *Powergrams,* October, 1927, 11.

[294] Dr. Samuel R. Benedict, "Employees Score One Hundred Plus in Clean-Up Contest," *Powergrams,* September, 1928, 1–3.

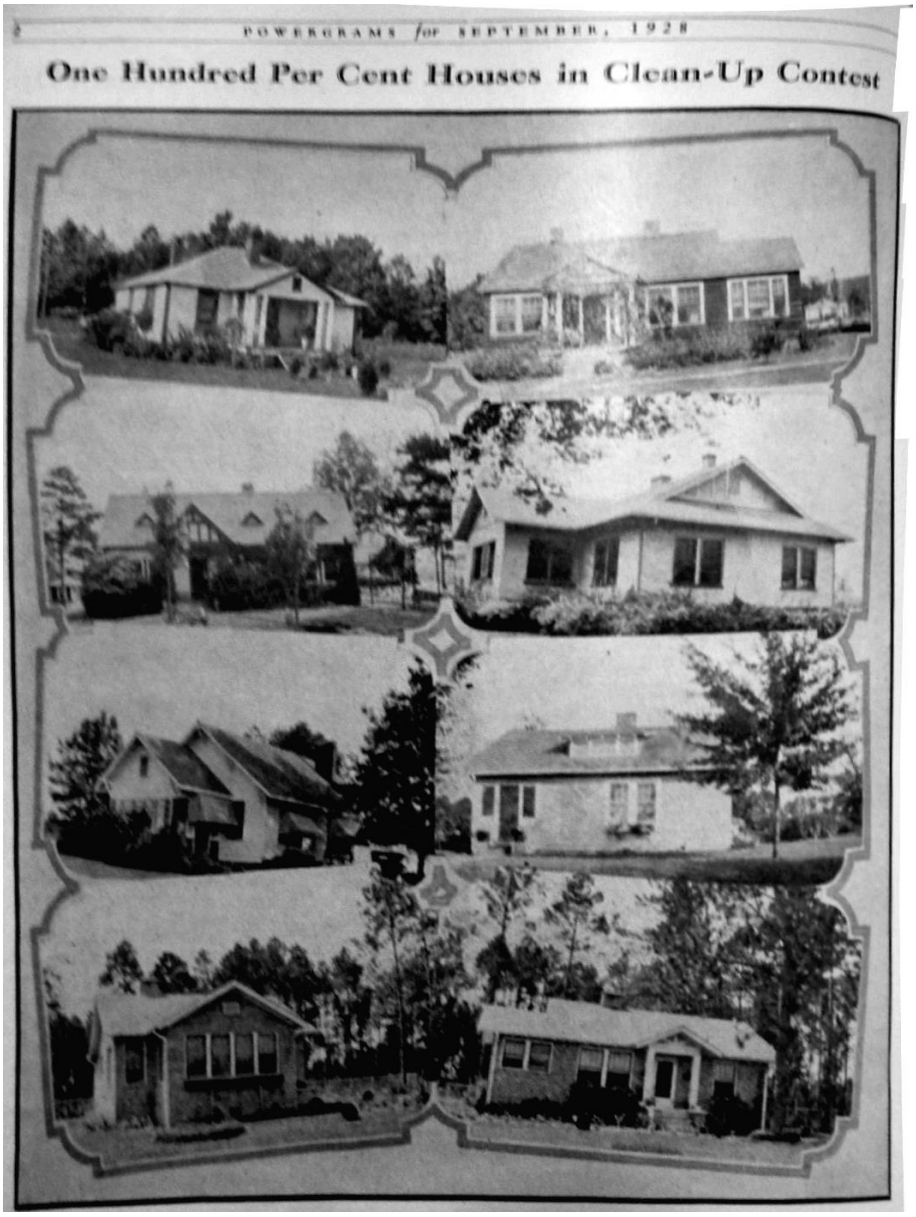
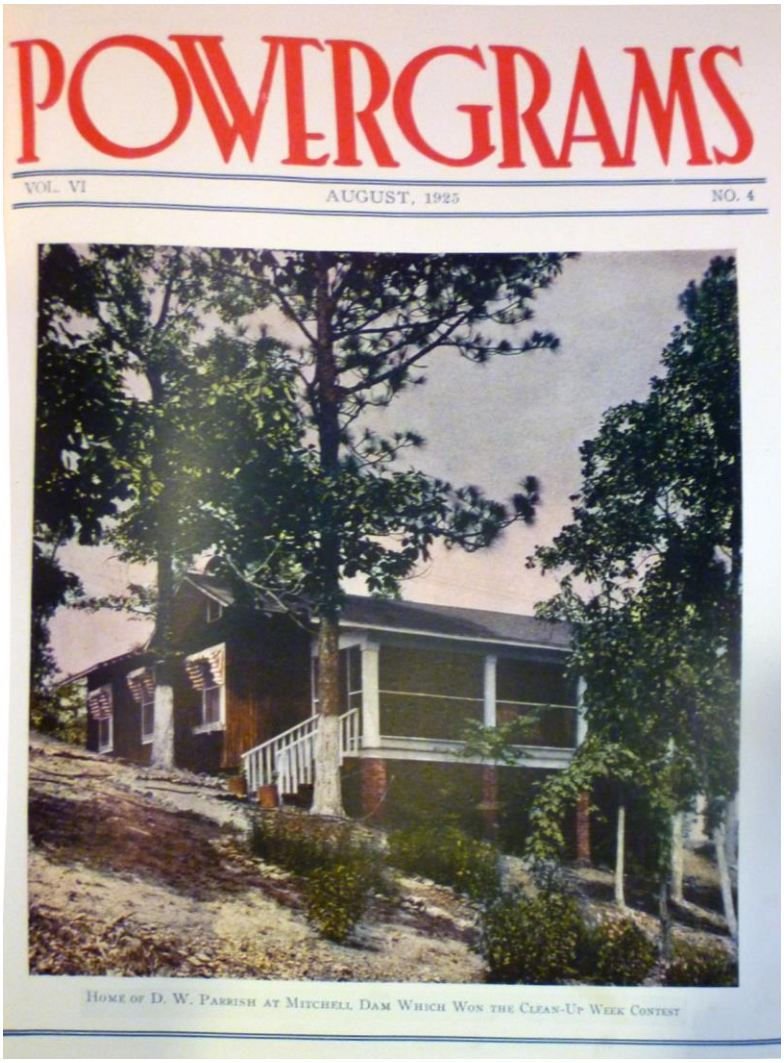


Figure 4.31 100 percent Houses, Powergrams, September 1928.

Benedict published articles frequently in Powergrams, but by July of 1925, the campaign had been enlarged into a competition. The August 1925 edition of *Powergrams* ran the winner's photo on the front cover (Figure 4.38). Pictured is a neat home of dark painted or stained wood nestled into the side of a hill with a screen porch across one end supported on brick pilings. The tree trunks have been Whitewashed with lime, thought to

be both decorative and to keep bugs away and a practice still seen in the more rural parts of Alabama.

Benedict stated in his article on the contest winners that equality of opportunity for winning was ensured by making sure "the character of the house in which the employee lived" was not taken into consideration and that he was surprised to note that not a single home of a permanent employee was among the winners.[295]



[295] Samuel R. Benedict, "Clean-Up Week Contest," *Powergrams* (August, 1923) 1, 2. All the winners were living in what were planned (and constructed) to be temporary houses, but that had been "converted into permanent abodes." The interior and "general sanitary conditions around the premises which would not actually show in a photograph" were the major concerns of the judges.

Figure 4.38 Home of D.W. Parrish, who won the Clean Up Week Contest in 1925.

4.2.3 The hospital at Martin Dam

In November 1923, Dr. Benedict wrote of the new hospital at Cherokee Bluffs that it was obvious that the difficulties of transporting patients to a city hospital would be compounded beyond the problems at Mitchell Dam since the Cherokee Bluffs location was even farther from civilization (Figure 4.39). Acknowledging that the hospital at Mitchell had been built too small for the number of patients seen on any given day while reasserting his contention that there had never been any kind of epidemic at Mitchell, Benedict explained that the hospital at Cherokee Bluffs would be the same size as that at Mitchell but with significant changes that would help to accommodate the numbers of patients expected to be seen. A different arrangement for the outpatient area would "facilitate a more rapid and better handling of these patients."[296] Laundry in the basement would help keep the bedding clean and would operate more efficiently than sending the hospital laundry across the camp to the larger facility used by all the rest of the camp. Like the hospital at Mitchell dam, the hospital at Cherokee Bluffs would be a temporary structure since there would be no need for a large facility when only the permanent employees and their families populated the camp. The equipment from Mitchell would be transported to the new hospital at Cherokee Bluffs, so having a hospital about the same size was just right.

[296] S. R. Benedict, "Power Company Hospitals", *Powergrams,* November, 1923, 14.

Figure 4.39 Elevation of Cherokee Bluffs Hospital, 10-30-1923.

Additional private rooms were provided for women and seriously ill[297] or injured men in the new Cherokee Bluffs hospital, another lesson learned at the hospital at Mitchell Dam. Another change expected by Benedict, but not yet confirmed at the time of publication, was the use of electric cooking and heating in addition to the electric operation of the sterilizers. This question had to be answered soon because the hospital was expected to be completed and occupied by November 25, 1923. Hundreds of men were already working in the camp, clearing trees and building the hospital itself, and other employees of the APC within a convenient radius of the new camp were expected to

[297] The stylistic choices were different at some of the camps, though architectural styles generally were kept homogenous within each camp. Whether this reflected the tastes of the designers or was an effort to help employees identify as a group different from the other camps, is not known.

be seen at the new hospital.[298] This new hospital also was shown in the architect's drawings to be a vernacular version of half-timber style (another iteration of the Arts and Crafts influence and similar to the hospital at Mitchell Dam), placed on piers above an irregular but mostly flat ground surface. The rear elevation rested on a lower ground level, also relatively flat except at one end where the ground had been dug out to provide access to the upper porch at grade, with that end nestling into the excavated bank.

The laundry was located on the lower level and had double doors opening to the exterior and one door opening to the hallway, which ran continuously below the upper floor, serving the lab, night nurse and dentist's offices, kitchen, stairs to the main floor, boiler room, coal bin, storage, and day nurse's office. Ceiling heights were 9'-0" on the basement level and 10'-0" on the main floor.

However, in another article, published in July 1924, a photograph of the hospital shows that the actual structure was perched at the crest of a small rise with one end higher above the ground than the other (Figure 4.40). The small staircase shown in the plans had become more complex with a landing and 90º turn since the elevation change is much more significant than shown on the plan drawing. This may indicate that the site selection was not confirmed when the plans were drawn or that the plans were intended to be more generic for use on other new dam construction projects.

The photograph published in July 1924 is an image that was already out-of-date by the time of publishing. A photograph by the company photographer taken the previous month shows that the trees have been thinned to allow more sunlight onto the grass.

[298] *Powergrams*, November, 1923, 15.

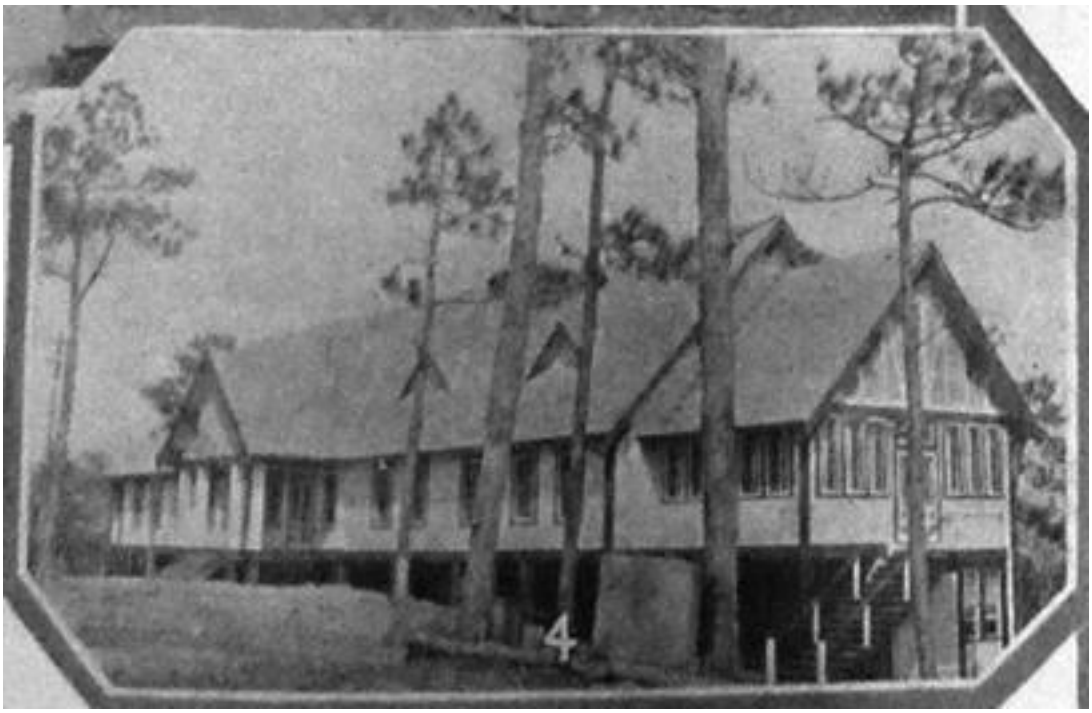


Figure 4.32 Cherokee Bluffs Hospital in Powergrams article, July 1924.

This arrangement certainly made entry from the lower level into the basement floor more inviting, especially helpful when a preventative policy of the APC mandated the administration of quinine at the company's expense to every employee working in any section where the malaria peril still existed. Malaria is still a vicious killer in underdeveloped areas of the world today, but the little-understood disease was slowly being eradicated in Alabama during the first half of the century. The quinine prophylactic was offered not only to the employees but also to every family member and outsiders who lived within the area of the new lake's shores.[299] Also, when the clearing of the forests

[299] "Cherokee a Healthy Spot," *Powergrams,* July, 1925, 17. This was in addition to the *gambusia* which were constantly working to eliminate the mosquito larvae in the waters of the lake. The APC was justifiably proud of its efforts to control sickness and prevent job-related accidents. The blood of each prospective employee was checked for malarial infection at the hospital lab and if found to be positive, company policy dictated the man could not be hired. The water supply and sewerage systems were state-of-the-art, although only the houses in the permanent camp had sanitary sewers. All houses were screened and the area around the camp was sprayed on a regular basis with a heavy oil to prevent mosquito breeding; fly

began (the first step in the construction of the camp and dam), all the inhabitants living within one mile of the backwater of the lake and in the basin yet unflooded[300] were tested for malaria. Any person found to be a carrier was started on the quinine treatment to "sterilize them" against the spread of the disease, and any employee who came down with the disease was removed from the basin and not allowed to continue his work.[301]

control and daily food inspections along with trash and rubbish hauled off daily by the company, meant all disease prevention precautions were employed. Not one single case of typhoid fever ever occurred in any of the company's developments. Water was drawn from the river and filtered then chlorinated. It was periodically analyzed to ensure the standard of high quality continued; the boast was often made in the Powergrams that, those who were not accustomed to the water at Cherokee Bluffs were liable to digestive upsets since the water was so pure.

[300] *DCC Reports*, December 1927.

[301] Dr. Samuel R. Benedict, "Malaria Control at Lake Martin," *Powergrams*, December, 1927, 7–8. All control work was done following the rules of the Alabama State Board of Health and Mr. L. C. Sims, Supervisor of Malaria Control, helped immensely with the oversight of the operations. Benedict confidently asserts "It is doubtful whether so stupendous a malaria control undertaking has ever been put on in the Southern States, and it is felt that the results obtained justified in every way the efforts made."


Figure 4.33 Cherokee Bluffs/Martin Dam Hospital, 6-4-1924.

4.2.4 The hospital at Jordan Dam

As had been done on three previous projects, including Mitchell and Cherokee Bluffs, the Dixie Construction Company built their own hospital for the construction crews and their families at Lock 18. (Gorgas did not get their new hospital until the following year.) Located on a gentle slope at the edge of the permanent camp, the hospital was accessible to all parts of the camp (Figure 4.42).

Figure 4.34 Lock 18/Jordan Dam hospital under construction 2-3-1927.

The building was "the same type of construction as the rest of the camp" and was "painted gray with White trimmings." Resembling "a giant butterfly" the hospital's wing accommodated both Whites and Blacks, separately but equally, with spaces for six beds in the wards and four in the sun parlors, plus private rooms. Adjoining the wards were sun porches where all the beds could be rolled outside to give patients fresh air and sunshine.[302]

Because he was so thoroughly convinced that sunshine was a great healer, Dr. Benedict had the hospital at Lock 18 built so that the porches had decks that were open to the elements (Figure 4.43). He gave the credit for this design to his observations while in Montreal where he visited several hospitals, notably the Children's Hospital, which had a terrace for sunning the patients. The beds were modified with ball-bearing rollers so that

[302] *Powergrams*, December, 1927.

with the patients still under the covers, they could be wheeled out daily and brought back inside at night. Dr. Benedict was of the opinion that the hospital at Lock 18 was the first of its kind in the South, and he hoped for "real results."[303]

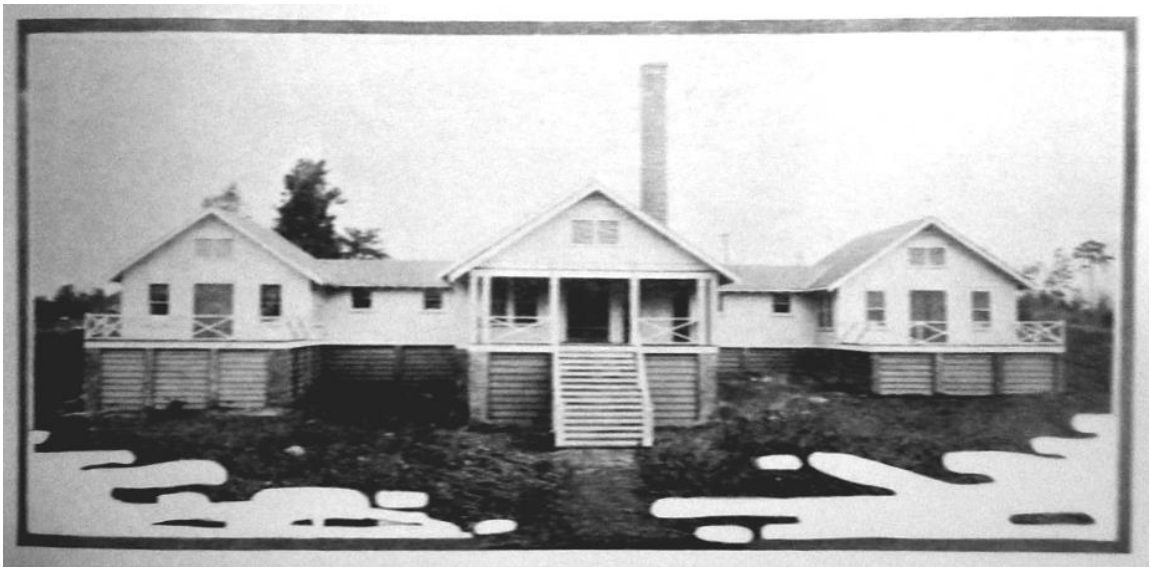


Figure 4.35 Company hospital at Lock 18/Jordan Dam in Powergrams, April, 1927.

Benedict's article included three captioned images of the hospital; a frontal long shot of the entire front façade and close-ups of both decks (Figures 4.44 and 4.45), evidently taken from a position on the central front porch. The hospital, as had become standardized for the APC, is the Palladian five-part type with the porches and decks turned toward the front and connected with hyphens that must have contained the private rooms and doctor's offices. Again, the hospital was placed on a sloping site, but this time, the ground sloped toward the front and the rear entry was at ground level.

[303] Samuel R. Benedict, "Health and Sunshine," *Powergrams,* April, 1927, 1–3.

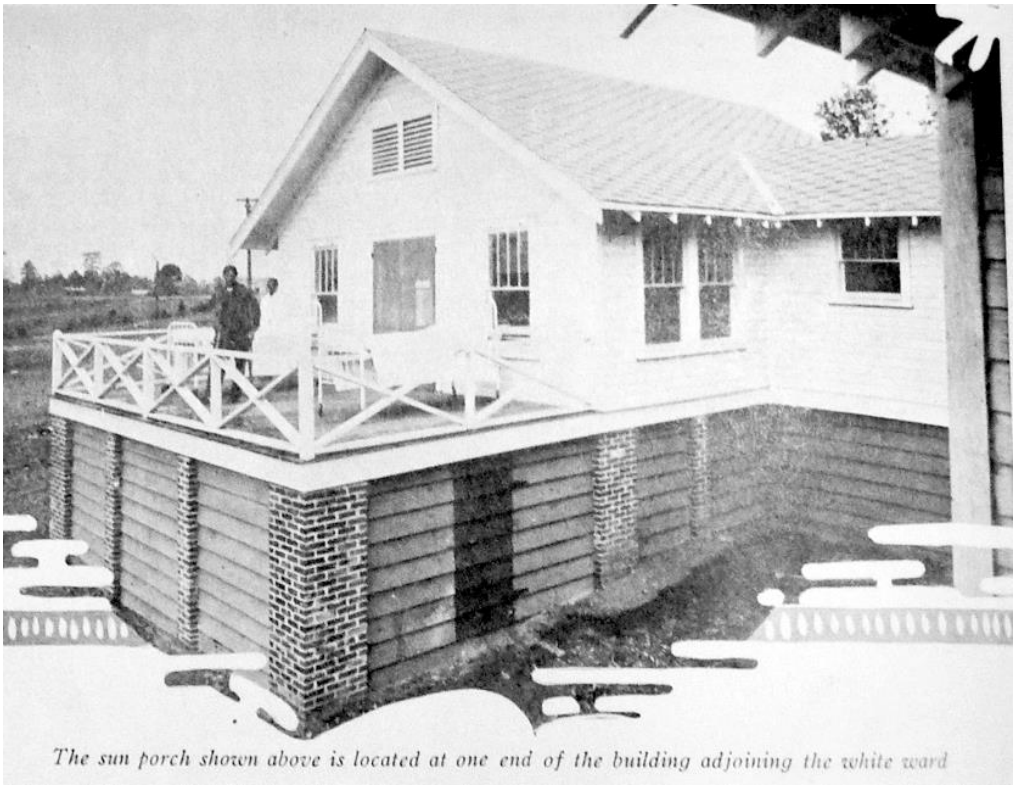


Figure 4.36 Porch for Whites, Jordan Dam.

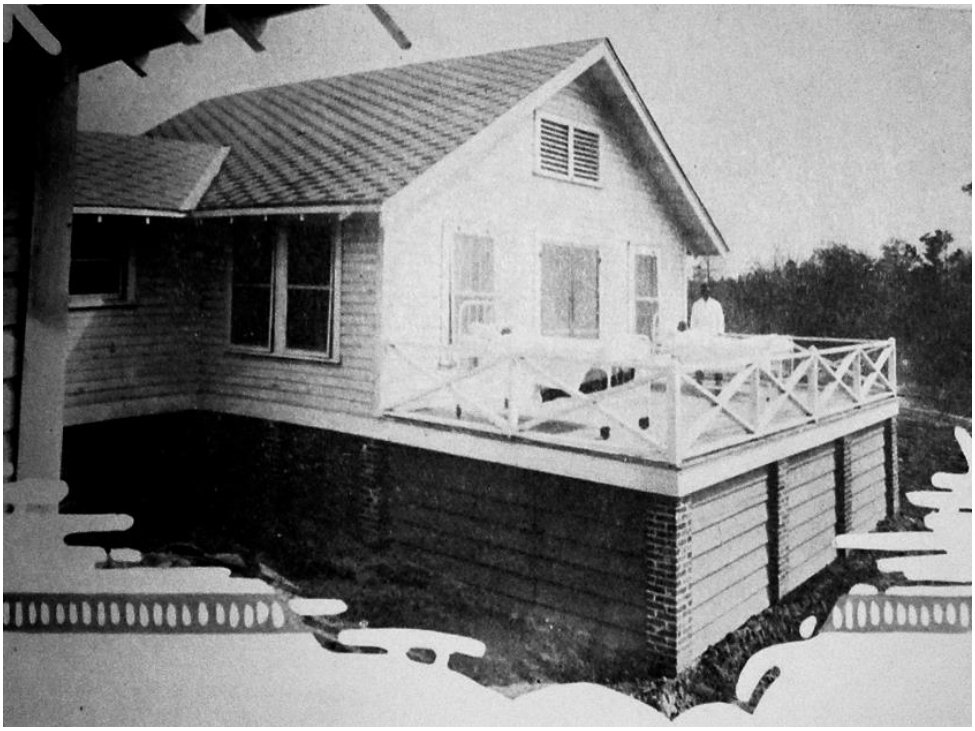


Figure 4.45 Porch for Blacks, Jordan Dam.

The sun porches were accessed through double doors on the same floor level as the interior. It appears that some storage rooms were below the decks because there was a basement with a large door below. A cross rail fence protected beds and ambulatory patients from disaster and gave character to the front façade, which was otherwise rather plain. Both porches had the same size and orientation towards the sunlight, a result of turning the wards and porches at right angles to the central hallway axis of the other hospital plans. This does not appear to have been done because of site considerations but rather to provide the warmest conditions: the porches faced south.

The equipment (brought from Cherokee Bluffs) was still "modern" and all-electric. Upgrades included "electric signals from each bed," presumably to call the nurse. There was enough bedding so that when a patient was discharged his felt mattress was steam cleaned and then put in the sun for added disinfection before being used again. The x-ray machine was evidently more portable than before since it operated "from a light socket connection." The hospital opened March 1, 1927 and operated to capacity with an average of twenty patients each day, totaling 347 patients by December first, which indicated a short average hospital stay. Only seventy-seven patients stayed longer than one day.[304]

This hospital was planned to serve the construction workers, and later, the permanent camp for the duration of the operation of the dam. The grounds were landscaped with flower beds, shrubs, and grass, and in the rear, an "excellent vegetable garden."[305] A photograph dated July 30, 1927, shows the extent of the landscaping to be

[304] M. S. Whiteside, "Jordan Dam Hospital," *Powergrams,* December, 1927, 6.

[305] *Powergrams*, December, 1927.

quite impressive (Figure 4.46). The sun porches are festooned with trailing vines, and the walk leading from the street to the front porch is planted with large shrubs that seem mature enough to have been there for years.

What seems to be a very disproportionately tall chimney to the right of the front porch (under construction in the February photograph, Figure 4.42) was not mentioned in the *Powergrams* article but must have been for a boiler in the basement under the front central portion of the offices. The other hospitals at the Cherokee Bluffs and Mitchell camps were provided with tall ventilating stacks although the one at Cherokee Bluffs was a finer, more delicate form suited to the Tudor style of the façade. Lock 17 and Gorgas were most similar in stylistic treatment and had the robust brick chimneys that balanced the cross-rail fencing of the porches.

Figure 4.37 Front view of the hospital Lock 18/Jordan Dam 7-30-1927.

The hospital at Lock 17/Jordan Dam was not the only building morphed into another shape that provided the best use according to the site upon which it was placed. The mess hall at Jordan took on a "butterfly" plan because by changing the orientation of the wings the by now standardized configuration for mess halls was able to better fit the steeper slope of the terrain at the site. The APC designers were clearly becoming more educated and inventive as they gained experience through feedback from the employees who worked in the buildings daily.

4.3 Mess Halls and other Communal Buildings

The decision to feed all employees not living in private housing was a pragmatic one. By buying in bulk, money was saved, and all men could bear the cost at a reasonable rate. The meal tickets were paid out of each man's wages, the accounts tallied regularly by an accountant and justified with the receipts from the mess halls.

4.3.1 Lay Dam (1910–1914)

At Lay Dam mess halls were initially provided for the two White camps and the Negro camp. (The White mess halls served either workmen or engineers in their separate camps. The engineers were APC employees and the workmen worked for McArthur Brothers.) However, the writer of the report states that the mess hall system did not work well for the Black workers. He believed that a better system would be to provide more individual houses for the Black men so they could have their wives cook for them, and that plan was adopted at the Lay Dam site when it was determined that the Black men were not happy with the mess hall system.[306] At the Italian and Swedish camps, no mess

[306] *DCC Construction History, Lay Dam, 1912–1925*, 31. The exact wording is more telling: "It is essential to holding the negro (sic) laborer on the work that he have his negro (sic) women along with him, as he will not stay in the camp unless the women are there." The management prudently allowed the shooting of craps and the card game of "skin" to be played in the Black camp, although it was illegal to

halls were provided because these men appreciated a cuisine different from that offered in the company mess halls. A bakery had to be built to provide the kind of bread they preferred.[307] These changes were made to keep the contracted workers on the job. Most were not locals, having been transported by McArthur Brothers from the north because they had the necessary skills and experience, so they did not have to be trained.

The same types of houses and mess halls were used at the nearby quarry where the cyclopean stone was quarried for the dam. This site housed a separate group of workers with a different skill set, and they were slightly different in terms of the cooking and living arrangements (as mentioned above.) The Black portion of this camp was housed in tents, which had a floor and sides of permanent wood framing. These tents were wood extending halfway up the sides and were open above the half-wall. The Italian quarrymen were supplied with "little kitchens" where they could cook for themselves.[308]

4.3.2 Gorgas Steam Plant/Warrior Steam Plant (1916–1919)

The plan drawings for the Gorgas Camp layout of 1918 shows the mess hall was located mid-way between the workplace and the residential area for non-permanent workers across the road from the commissary (Figure 4.47). The tent camp was arranged

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gamble in Alabama – as long as they stayed and played quietly in the camps, the law was bent by the company police force.

[307] *DCC Construction History, Lay Dam, 1912–1925*, 31. All the mess halls at Lay Dam charged White workers for the food at the rate of $5.00 per week (this included those quartered in the bunkhouses) and Black workers were charged $3.50 per week (including their housing). A large portion of the left-over food "material" from the White messes was incorporated into the menu for the Black mess. Rent was charged separately to those Whites living in all other housing. The method of payment at the mess halls was managed by the names being checked off a list at the door and the employee further had to "show a brass check" or have a properly signed order to get inside. This protocol was instigated to counteract the anticipated abuse by discharged employees who otherwise might hang around and eat without payment. The bookkeeping required to keep track of the board bills and payments must have been quite demanding with such a fluid workforce. It should be no surprise that a large bookkeeping department was part of the staff at Lay Dam.

[308] *DCC Construction History, Lay Dam, 1912–1925.*

in military fashion on a grid without much attention given to the topography. The larger buildings nearer the water are the hospital and some permanent operators' houses (toward the center of the drawing.) Both the mess hall and the commissary are denoted as semi-permanent structures by the hatching style shown in a legend on the drawing.

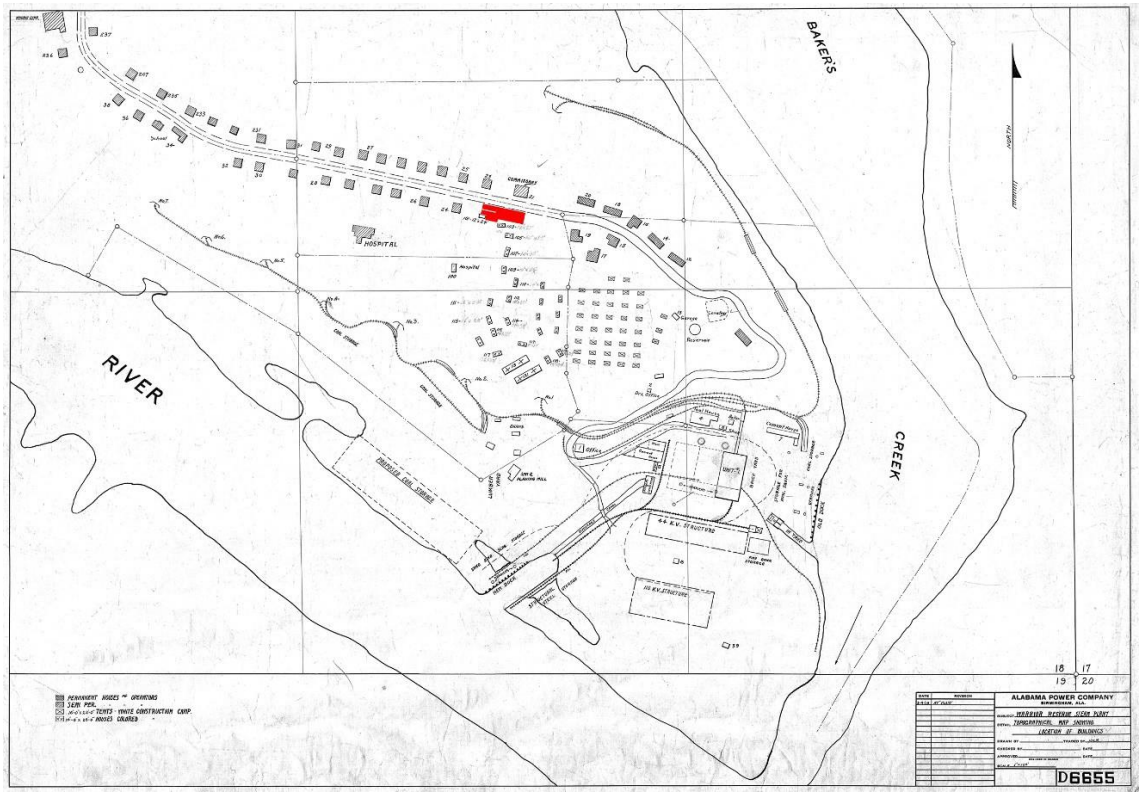

Figure 4.38 Gorgas Steam Plant Mess Hall in Red 3-9-1918.

On April 8, 1920, the old mess hall that had been repurposed from a Winona Coal Company building caught fire and was destroyed; the building and all equipment were a complete loss. Until a new building could be erected (Figure 4.48), Mrs. Mitchell served meals in the old government mess hall, which was temporarily opened for that purpose.[309]

[309] C. O. Lineberry, *Powergrams*, July, 1921, 7. The Gorgas Plant Superintendent from 1920–1948, Lineberry was known by the sobriquet "Chief" and was much loved by the workers. He was ribbed in the March 1921 issue of Powergrams with a tale of his new .22 caliber pistol. Having been the "proud owner of this weapon for ten days" Chief reportedly had shot some 2500 rounds just for practice. It is

The local wags called Mrs. Mitchell's new dining hall (Figure 4.49), the "Café de Luxe" when it was completed.[310] By October of 1924, Mrs. Mitchell's new dining hall was given a very complimentary write-up in *Powergrams,* and she was described as a "most capable dietician."[311] Apparently, her "jovial disposition" endeared her to outsiders as well as "her boys." Mrs. Mitchell acted as the matron in charge of the guest house in addition to her role as the head dietician for the mess hall.[312] Mrs. Mitchell was certainly a favorite as she is frequently mentioned in the *Powergrams* articles. As head dietician, she planned the food for other dining rooms around the camp. Among the other dining rooms was the Gorgas Inn where the food was widely renowned, and dignitaries stayed there when they visited.[313]

difficult to know whether this was really true or not, however, "Chief" was also reported to have challenged any man working for the APC to "a pistol match, at any distance, and for any amount." *Powergrams* had a large following of readers who were interested in the social doings of fellow APC workers and announcements of engagements, weddings, and births were a regular part of the news reported each month.

[310] M. O. Howle, "Greetings From Gorgas," *Powergrams,* August, 1921, 4.

[311] Leah Rawls Atkins, *Developed for the Service of Alabama* (Birmingham, AL: Alabama Power Company, 2006), 121.

[312] Willie Whitsit, "A Visitor's View of Gorgas," *Powergrams,* October, 1924, 14. Lena Mitchell was the widow of APC President James Mitchell's brother Bob. She came to Alabama in 1913 to supervise the mess hall at Lock 12 (Lay Dam) when it was under construction, but it was at Gorgas that she developed her reputation as a skillful and gracious hostess. She was "especially noted for her mince pie, biscuits and strawberry shortcake" and her brother-in-law and Tom Martin, also an APC president, frequently brought important visitors to the Gorgas plant to have a meal at her dining hall.

[313] A. M. Howle, "Gorgas," *Powergrams,* November, 1921, 7. Howle related the tremendous appetite of Thomas Bragg, an Auburn professor who became the APC's manager of the investment department in 1920.

Figure 4.39 Gorgas Mess Hall Interior, 1922.


Figure 4.40 Lena Mitchell in front of the “Café de Luxe” Powergrams, August 1921.

A wooden building "built in the shape of a cross with the kitchen in the center" opened at Gorgas on December 6, 1927, with a capacity to serve 310 meals at once, which was the estimated peak number for several months (Figure 4.50). However, in June 1926, because of an influx of form-work carpenters, an average of 345 meals were served at noon, with the highest number served placed at 387. The total number of meals served in June 1928 was 26,796; in July 22,749 meals were served, and during August there were 18,614. These numbers reflect the fact that meals were served at midnight to the night shift workers.[314] Work was proceeding around the clock, with the men working in shifts.[315] According to Northcutt, the mess halls were used mostly to feed the construction crews who lived in the bachelor's quarters, but also for company functions like safety meetings or training. He remembered the company's annual Christmas Party complete with "Santa giving out toys, fruit, candy and nuts to all employee's children," but the dining use was discontinued, and the hall torn down after World War II.[316]

[314] *DCC Construction Department Annual Report, 1927*, 30, 31.

[315] *DCC Construction Department Annual Report, 1927*, 30,31. Economical operation of the mess hall was difficult because it served twice as many people at midday dinner as it did at any other meal, but the overhead was constant at breakfast and supper. Meal tickets cost $.35 each for Whites and $.30 each for Blacks. It had been discovered that men were skipping meals to save on meal tickets and then gorging themselves when they did eat. One possible solution broached was to sell tickets for three meals a day instead of one ticket per meal and if only one meal were needed, that meal would be at an increased price, although it is not clear that this idea was ever implemented.

[316] Northcutt, 3–34.

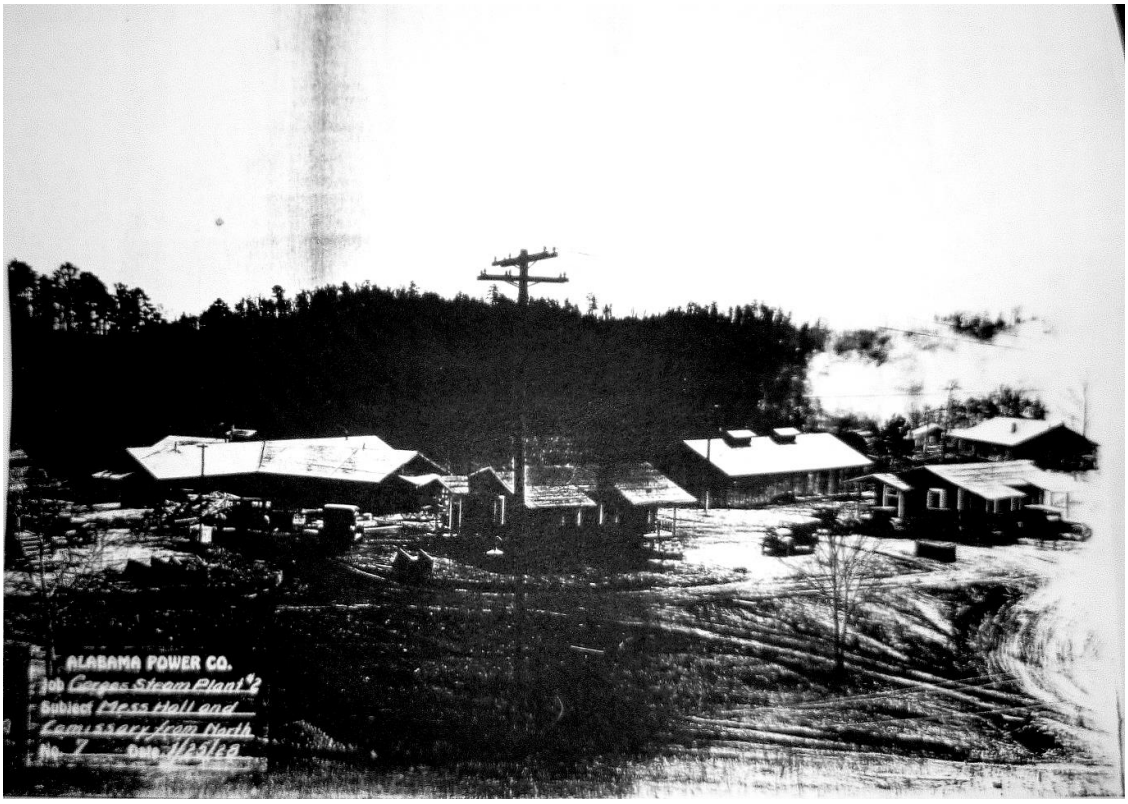

Figure 4.50 Mess Hall (left rear) and Commissary (center), 1-25-1928.

The company operated a commissary for the benefit of the employees because there was no other place to shop for essentials unless one was willing to undertake a long trip to town. Most employees did not have transportation, so the commissary was a necessity and the only choice. The Gorgas commissary was 72 feet long by 30 feet wide and made of timber construction covered with tar paper. There was a storage room (32’ x 8’) and two covered porches (20’ x 8’). The roof was a “gable type roof . . . covered with 3- ply roofing paper, 1” rough siding covered with 2-ply paper held in place with 1 x 4 (sic) strips, partitions, counters, shelves, office at one end, and a meat market at the other.” The total cost of the building was $2,677.61, which was broken down into

$765.06 for labor and $912.55 for materials.[317] It opened on January 3, 1928, supplying items such as "fresh meats, vegetables and groceries." These were brought by rail from Birmingham on a daily basis during peak months. However, there was no contract made with any wholesale house, which resulted in a problem with getting good milk. Three suppliers are recorded: the Walker County Creamery at Jasper, the Southern Dairies at Birmingham, and H. W. Thompson at Parrish. Although Birmingham was farther away, it was easier and quicker to transport milk by rail than by wagon or truck over rough roads through the countryside. Ice was not such a problem. Ice was regularly delivered by truck from the Parrish Coal Company in Parrish, Alabama.[318]

Camp citizens who were not allowed to eat in the mess hall, such as wives and children of married employees (who were primarily engineers and foremen), had to shop at the commissary for all household items including groceries unless they gardened or relied on the services of truck farmers who brought vegetables to sell directly from farm to table. (Refrigerators if present in homes, were in the form of iceboxes, but wives could plan to make daily trips to the commissary if necessary.) Great interest was taken, therefore, in the Domestic Purchasing Society (DPS) formed by the plant's employees at the suggestion of the superintendent. By buying in large quantities, the society was able to bring the cost down substantially cutting out the profit made for the company by the commissary. Goods were sold at cost, plus freight and drayage, from a storeroom in the office building and the money was deducted from wages through the payroll office.[319]

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[317] *DCC Construction Department Annual Report, 1927, 30*, 31.

[318] *DCC Construction Department Annual Report, 1927.*

[319] C.O. Lineberry, "Gleanings from Gorgas," *Powergrams*, September, 1920, 22–23.

The APC supported this outside sourcing of groceries and necessities because the commissary was run at no profit; it was an expense the company had been willing to bear to support the families of employees,[320] so it was to the company's advantage to have the DPS on-site.

The "DPS commissary" was repaired, remodeled, and an addition was made in August of 1928, according to Sheet "A" in the August Dixie Construction Company Weekly Construction Report. This information is unclear because the heading "Narrative" at the top of the page lists the progress as being made at the APC commissary.[321] This sort of sloppy reference is fairly routine in the DCC reports. The language was probably clear at the time but now confounds the researcher. Why would a six-month-old commissary require remodeling and additions unless there was another large influx of workers and therefore an increase in family population in the camp? Or did the DPS commissary completely take over the function of the APC subsidized version? The record is mute on this subject, but it seems likely that the overhead expenses and payroll for staff would have been saved if the APC no longer had to run the commissary.

4.3.3 Mitchell Dam/Duncan's Riffle (1921-23)

There are no extant drawings of the Mitchell Dam mess hall although there is a photo of the clubhouse (Figure 4.51). The mess hall would have operated in a similar fashion to the other camps in the 1920s and been of similar construction. Unfortunately, there was no written description found. The clubhouse figures prominently in the ongoing narrative in *Powergrams,* however. By this time, the guests of the APC were beginning to

[320] Not all the commissaries ran at a loss. See the discussion of the Cherokee Bluffs/Martin Dam commissary later in this chapter.

[321] *DCC Weekly Construction Report,* August 31, 1929, Sheet "A".

include employees on holiday coming to enjoy the rustic hospitality of this city in the wilderness. In July of 1923, L. N. Branch, Resident Engineer, described visitors to the camp. “Two large excursions were entertained during the month. The Troy civic clubs brought 250 members, and the American Legion from Montgomery 175 members and friends.” During the same month five temporary cottage houses were enlarged “by adding one room,” and sewer lines to connect these five houses with the camp system were installed.[322]

Figure 4.41 Mitchell Dam Clubhouse, undated.

[322] *DCC Weekly Construction Report,* August 31, 1929, Sheet “A”. The cover letter was dated Aug. 7, 1923, signed L.N. Branch, Resident Engineer.

Evidently, the idea of improving the return on the initial investment had become prominent in the minds of the APC directors. *Powergrams* articles on the "Recreation Paradise" that Camp Mitchell became sang the praises of the budding spring trees and the "fastest motorboat on Alabama rivers," the tennis courts (lighted for use at night), a concrete swimming pool (Figure 4.52), and a clubhouse where the guest could dine and sleep on beds "as clean and comfortable as those in his own home."[323] This clubhouse was offered for the use of transient guests as there were only three bedrooms. These were "handsomely equipped" with furnishings (Figure 4.53), the "finest which can be bought."

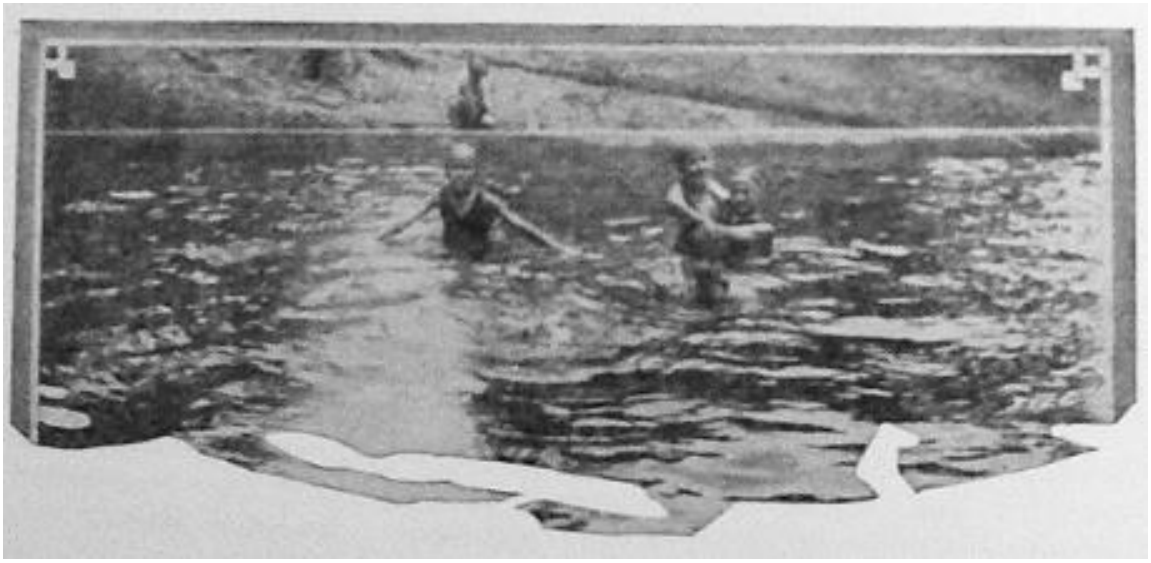


Figure 4.52 Swimming pool at Camp Mitchell, 1924.

[323] *Powergrams*, "Camp Mitchell Becomes A Recreation Paradise," March, 1924, 1.

Figure 4.42 Mitchell Club Rooms.

According to the article's writer, it was now incumbent upon the APC employees to volunteer to place the "family houses in the same condition as new" by disassembling them and after all the lumber was planed, reassembling them over the course of a few weekends.[324] At the end of the article, there was a form to be filled out to apply for membership or renewal in the A.P.C. Club Corporation. Dues were $9.60 per year for male members and $4.80 for female members, payable by payroll deduction or in cash.[325]

[324] 2.

[325] 3.

The clubhouse had a screened wrap-around porch on at least two sides at the upper level where the front door opened immediately on the driveway with a small stoop (Figure 4.54). A lower level was accessed on the downhill side as the structure was built into the side of a hill, typical of so many APC buildings in the camps.

Figure 4.43 A residence, tennis courts and the clubhouse at Camp Mitchell, March 1924.

Black workers also enjoyed leisure time activities. There was one dance hall where a concession was granted to "a negro to operate the dance hall and sell cigarettes, etc. when a pool hall stand was closed (Figures 4.55). This Negro employed a piano player and installed a piano."[326] The company operated the pool hall for Black employees containing four pool tables and a soft drink and cigar stand (Figure 4.56). There was also a combination school and church building for the Black workers that hosted a movie shown once a week by another concessionaire.[327]

[326] *DCC Job reports, 1926–27*. Apparently, "this negro" was an enterprising man, but his name is not recorded. The omission of the man's name may have been because a clerk did not know it, or it may have been simply another instance of the widespread mistreatment of the Black workingman so common in this era.

[327] *DCC Job reports, 1926–27*.

Figure 4.44 Black Dance Hall at Martin Dam 6-23-1925.

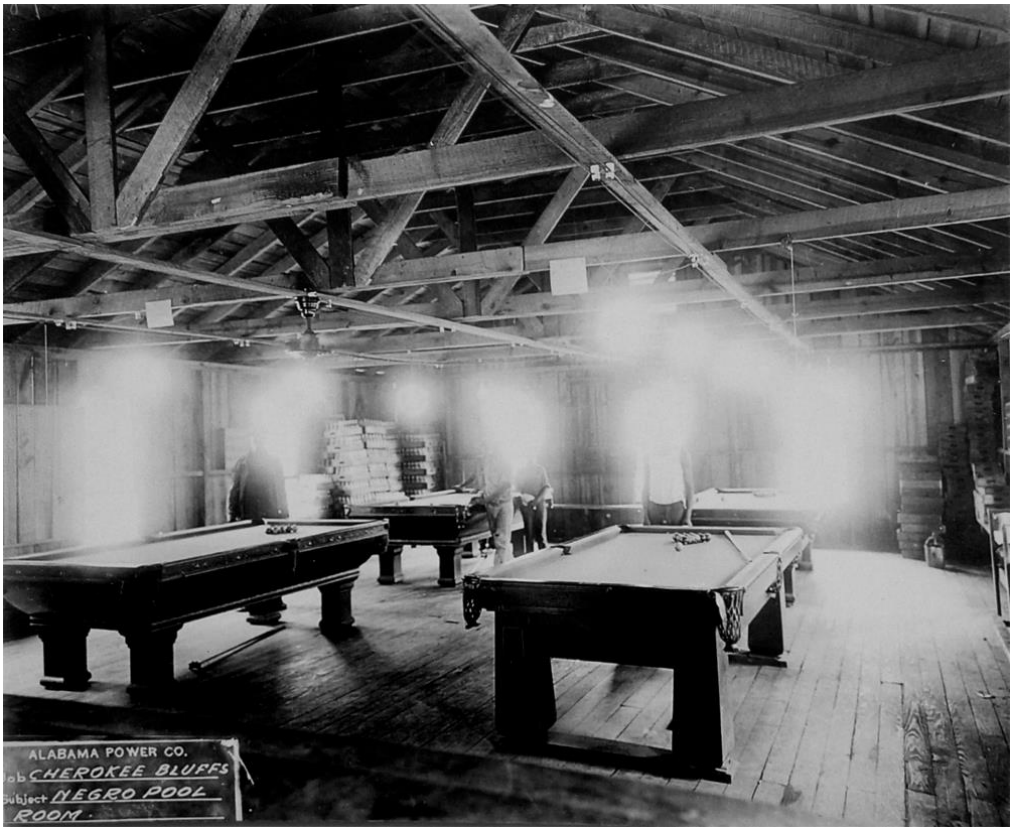


Figure 4.56 Black Pool Room at Martin, 6-23-1925.

4.3.4 Martin Dam/Cherokee Bluffs (1923-26)

In July of 1923, three bunkhouses were constructed at Martin Dam/Cherokee Bluffs one of which was to serve as a temporary dining room and kitchen for the men while the larger mess hall was under construction. This first main mess hall was "put into service" on September 3, 1923. Having been designed to serve 300 White and 180 Black employees of the DCC, it was operated with state-of-the-art electrical equipment, including an electric range. One large kitchen served both sides of the mess hall.[328]

[328] *DCC Year-end Report*, December 1924, 165.

The original mess hall burned down on April 3, 1924, so a new mess hall was constructed and completed by the fourth of July 1924, when meals were once again served to the workers. The drawing for this mess hall shows the kitchen to be centrally located with a dining wing for Whites and another for Blacks (Figure 4.57). (Note the drawing was signed off after the completion of the construction. Records had to be kept in case of later need.) The mess hall at Cherokee Bluffs was similar to the previous designs with one major change; because the site conditions dictated a new placement of the wings, the axial alignment of spaces previously simply strung together was changed to orient the three major parts along different axes. At Cherokee Bluffs, the White mess hall was turned 90° to the kitchen, and the Black dining room was angled at 15° to the kitchen on the other side. Although there is no notation on the drawing, it is probable this was in response to the site, where the topography or adjacent buildings would have interfered with the usual axial alignment. A photograph published in September 1923 confirms this hypothesis (Figure 4.58). The mess halls were inserted into the side of a hill in typical APC “can do” fashion.

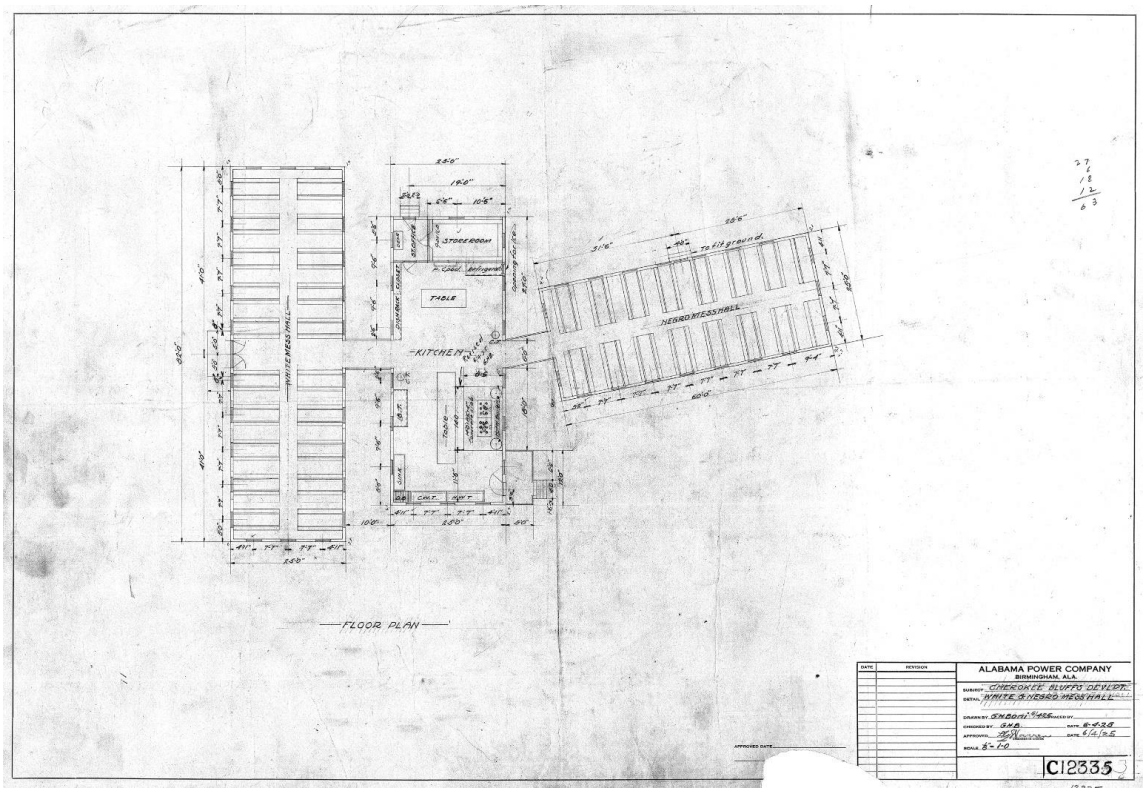


Figure 4.57 Cherokee Bluffs Mess Hall, 6-4-1925.


Figure 4.45 Mess Halls and Kitchen at Martin Dam September, 1923 Powergrams.

The new mess halls would have had to be adapted to the same or a similar site so the two new dining rooms were still connected to the kitchen with short hyphens six feet wide. These hallways opened off the kitchen in a location more or less central to the long walls of the kitchen itself. The White mess hall has a centrally located porch entry with double doors opening inwards from a 10’0” x 7’7” deck. The porch probably was roofed, but the plan does not indicate what types of roofs the dining hall had. The Black mess hall has one door in the middle of the long side and two steps are indicated “to fit ground” – another indication that the topography would require on-site adjustments to the plan. No porch or deck is indicated here. In both the Black and White mess halls, windows were aligned with the tables for daylight and for cross-ventilation in the warmer months. Three windows were placed across the short side of the mess halls. In the Black mess hall, the last tables had only one bench and the windows above the tables were along the end wall only. This seems a mistake in calculations. Why not extend the mess hall another 18” to accommodate one more bench and window? Or why not shorten the mess hall and eliminate the last tables? If the numbers of diners were still 300 Whites and 180 Blacks, the table arrangements as shown would accommodate 12 Black men and 15 White men at the same size tables. Given that Whites always received preferential treatment where possible, this seems off-kilter, but it is possible there just was not enough room on the site.

The large cook stove was set upon a four-inch-thick concrete slab, which extended around all four sides and was revised to extend all the way to the large preparation table (20’ x 4’) as noted on June 9, 1925. This may have been done to protect the floor from the heat of the stove. Fires in the mess halls were certainly a threat. Two hot water boilers

were placed at either end of the stove along the wall. The large storeroom was protected by the 9’0” x 16’ 0” storeroom office equipped with a desk for the use of the dietician who was expected to keep strict accounts of inventory of all types. An exterior door to three steps (no landing) opened to grade, and an interior door opened to the kitchen for keeping an eye on the cooking. The location of the refrigerator accommodates an opening to the outside so that ice could be loaded directly from the delivery truck without having to come through the kitchen. (The APC did not yet have electric refrigerators at the site, or the ice was required to cool meats and other food items during preparation. Or maybe they did need a truckload of ice for the ice water and iced tea that have always been popular drinks in the American South!) AT the opposite end of the kitchen, a sink for washing up was lit by a window and a drying board was located in the corner. Cupboards and dishracks line the walls, and other tables were located where there was room for the cooks to work without being in each other’s way. The cook’s entry to the kitchen was at the southeast corner and appears to have been roofed as it was generously sized at 12”0” x 5’0” with four steps to grade. This would indicate the porch was used for some of the meal prep.

The number of meals served varied; the average per day count varied between 445 and 953, but the record-breaking month came in May 1924, when 45,583 meals were served, giving an average of 490 men served per meal, three meals per day. Although the mess hall was operated at a loss to the company, it was felt a necessity for the well-being of the men and for the quality of the work. To lessen overhead, the company ran a truck farm on property adjacent to the camp. Hogs were fattened on the left-over food from the

mess hall to augment the meats served in the mess hall.[329] This operation was on a small scale, and no operational information was kept, but it seems to have solved the problem of garbage disposal as well as producing fresh pork for special occasions. The losses sustained in the operation of the mess hall were made up in the operation of the commissary, which sold freshly butchered meats.

The operation of the mess hall was under the care of "a steward who handled a full complement of cooks, kitchen help and table waiters, the force varying with the patronage." The cost of the meals was handled with a ticketing system where the men bought meal tickets through a payroll deduction plan. (Non-cash purchases at the company commissary were handled similarly as were the bakery and pool room/club-house sales. Books of tickets were sold, eliminating the expense of running accounts with individual employees.) The tickets were collected at each meal and part of the job of the steward was to keep track of the number of meals served. His books were audited daily by the accounting department. At about three-month intervals, a detailed inventory was made of stock on hand at the mess hall, pool room/clubhouses, and bakery, and this was reconciled with goods purchased and sold so that a profit/loss statement could be prepared. The largest reported sales for one month at the mess hall was $10,766.95, a number consisting of meals sold at the rates of twenty-five cents per meal for Whites and twenty cents per meal for Blacks. (The price went up to thirty and twenty-five cents per meal, respectively, when in February of 1925 prices were raised to combat the losses of the mess hall's operation.).[330] The strictness of the bookkeeping was undoubtedly

[329] *DCC Year-end Report*, December 1924, 96–97.

[330] *DCC Year-end Report*, December 1924, 90–97.

required not only for inventory purposes, but to expose any pilfering or favoritism by employees at any level. Dixie Construction Company ran a tight ship, and the profit or loss from the operation of the mess halls was only one line item in a lengthy list of expenses related to the construction of the dam. The bakery at Cherokee Bluffs was opened at the same time as the commissary in August 1924 (Figure 4.59). "It was modern in every respect, with electrically driven equipment," boasted the author of the DCC Progress Report in March, 1927.[331] It was equipped for baking bread and cakes that were sold to the mess hall and to employees through the commissary, but it may have produced other confections on occasion inside a space 20' wide and 30' long. Three troughs for mixing dough, a proofing box, and several tables for working with the dough or wrapping the finished loaves were arranged along one long wall of the bakery building. One 3' x 5' dressing room was provided along this same wall, which indicates the bakery employees may have worn something other than simple aprons while working in the bakery. There was a large mixing machine to knead large batches of bread and cakes in a corner, with tables and bread racks in the middle of the space. Along the two short walls there was a bread box at one end and a small sink at the other near the mixing machine.

An oven was placed in the far corner where it would not disturb the rising bread. This oven was placed 18" from the walls to avoid scorching. The threat of fire was ever-present in the camp, so the bread oven was cautiously placed. Nine sliding windows and three doors were placed around the building for ventilation. One door led into a landing with a raised platform in the corner and another door to the outside with its own 3' x 5' landing. A more direct access was the door in the center of the long wall opposite the

[331] *DCC Progress Report*, March 31, 1927, 92

bread making area. The Profit and Loss statement as of December 31, 1926 shows that the bakery made a net profit of $6,240.21 on sales of $26,007.34 or 24 percent,[332] not bad for a company that said it ran these concessions to make the employees happy.

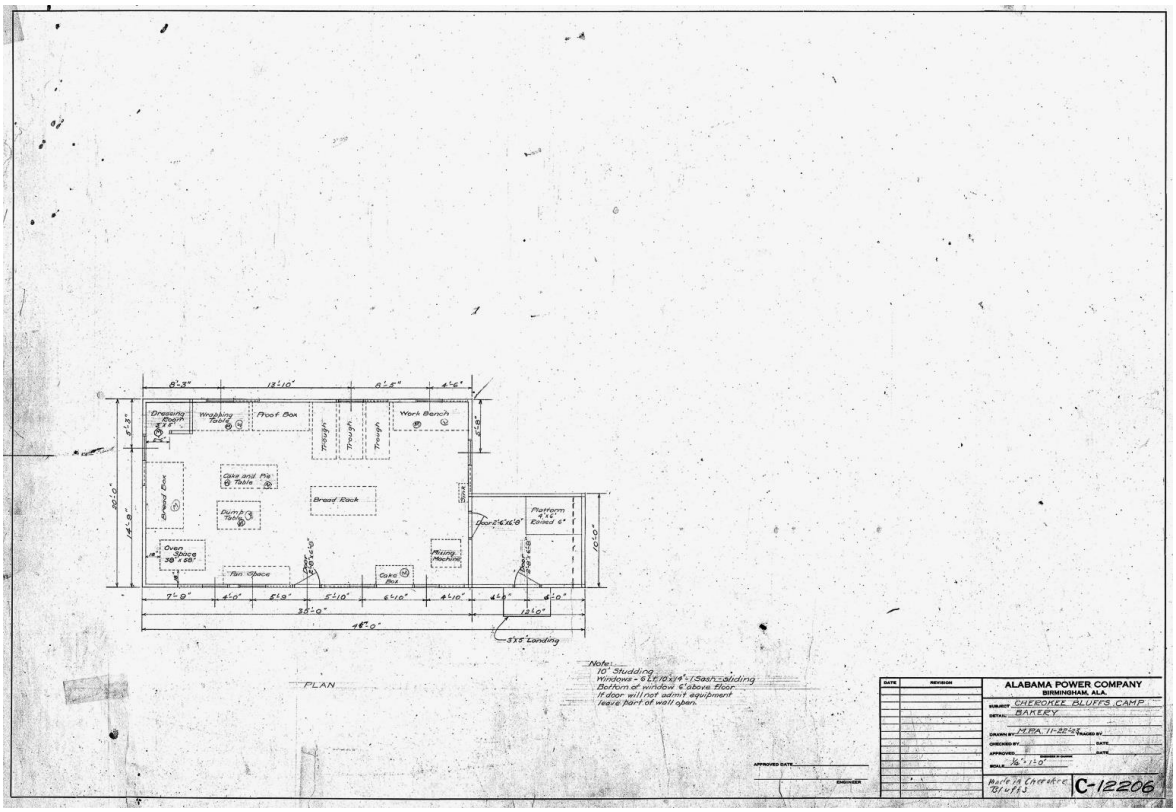


Figure 4.59 Bakery at Cherokee Bluffs, 11-23-1923.

The mercantile store (Figure 4.60) or commissary was opened on August 10, 1924 and ran continuously for forty and one-half months.[333] At 72’ x 30’, it had just enough space for a u-shaped counter behind which stood employees eager to serve dry goods, groceries, fresh and canned vegetables, and, tobacco and soft drinks to the captive clientele of the camp. Space was further divided by a 12’ x 12’ post office in one corner

[332] *DCC Progress Report,* March 31, 1927, 95.

[333] *DCC Progress Report,* March 31, 1927, 90.

of the commissary and a meat market in the opposite corner with its own 8’ x 12’x 8’ cooler to keep the meat fresh. A storeroom (12’ x 26’) was attached to the rear of the commissary. It was accessed through two doors from the interior of the commissary. A set of double doors opened to a platform 8’ x 12’ outside to receive the goods sold at the commissary. Both spaces were lit with transom windows equally to illuminate without taking too much valuable storage space and to inhibit theft.

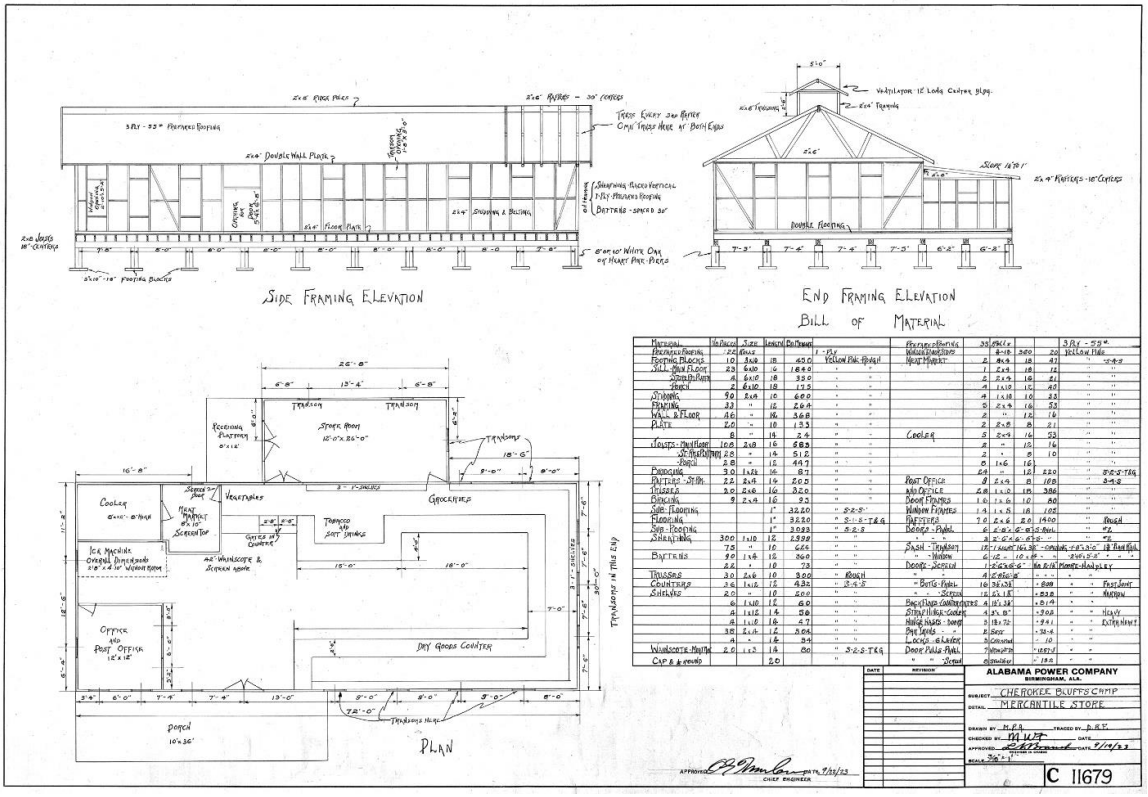


Figure 4.60 Mercantile Store, Cherokee Bluffs, 9-19-1923.

The commissary accounts show that business was brisk. Total sales of $ 820,373.98 were recorded for the year of 1926, broken down into retail sales of $ 572,142.76 and mess hall and camp sales of $ 248,231.52 with a profit after expenses of $

63,698.66. Employees paid by cash or by payroll deductions except for the store checks, which were "used extensively." These were a type of coupon book sold to employees through payroll deduction and used in lieu of cash. This eliminated the trouble and expense of trying to keep accounts with so many individuals although the store check sales were carefully audited every day.[334]

This time the commissary was intended to make a nominal profit and be a "service of convenience" for the employees with the prices lower than those in nearby towns. A daily delivery route served the houses in the camp with fresh eggs, vegetables, and poultry purchased by the company from local farms and retailed to employees. Ice was also available in the summer months. The company store sold and supplied goods to the "mess hall, hospital, clubhouses (pool rooms) sic, and guest house…at cost plus a small handling charge."[335]

Ice was a necessity for the hot summers in Alabama. An ice machine (2'8" x 4'10" without the motor), immediately adjacent to the meat cooler supplied its ice and perhaps was more convenient for shoppers than the large ice plant built adjacent to the water plant in December 1923. (This had a storage capacity of 10 tons in an 8' x 8' building.) During the spring and summer of 1924, extremely high temperatures meant a supply of only 3600 pounds of ice could be produced in 24 hours, but it brought relief to the workers and families at 70 cents per 100 pounds delivered to the houses. It was also delivered to water coolers placed about the camp for drinking water.[336] It became

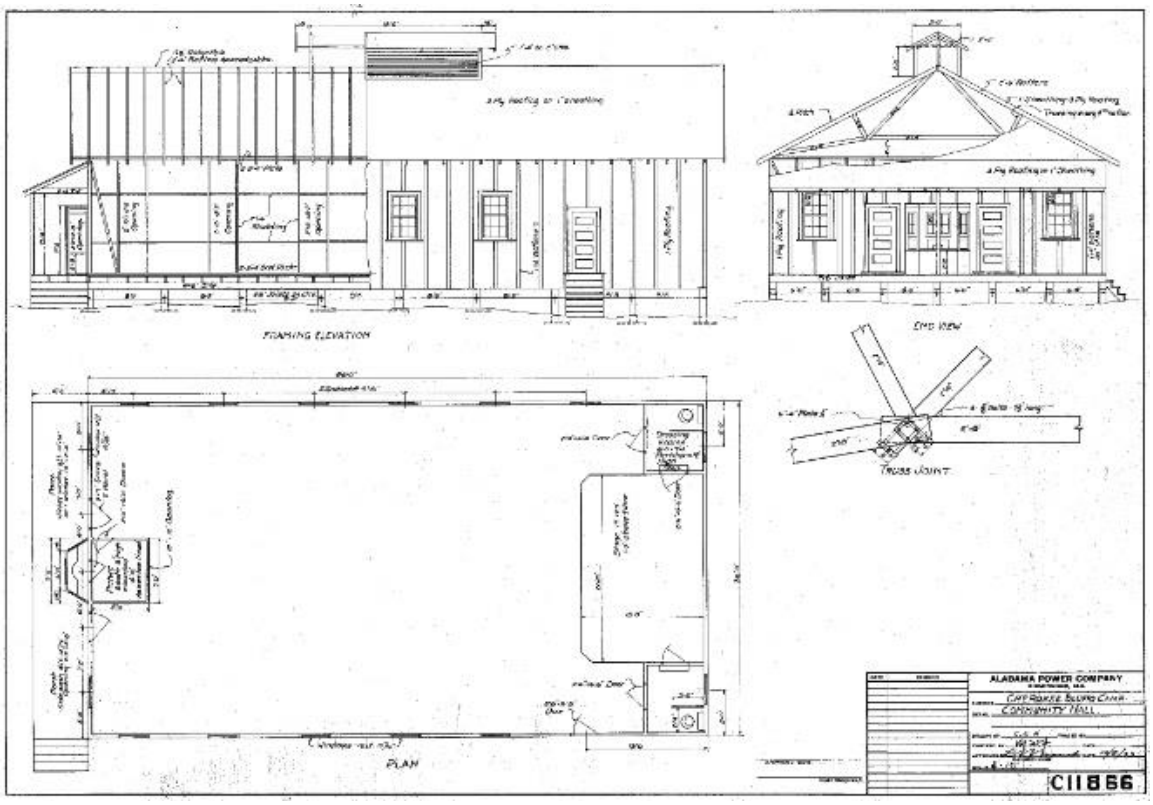
[334] *DCC Progress Report*, March 31, 1927, 90, 91.

[335] *DCC Progress Report*, March 31, 1927, 90.

[336] *DCC Progress Report*, March 31, 1927, 89.

necessary to purchase ice (two carloads a day according to the Report) because more laborers were brought in to work during the summers of 1925 and 1926, coupled with the small production of the ice plant. Another ice storage building was constructed in June 1925 to store the two carloads of ice brought in via railcar from Montgomery each day. The new icehouse was constructed at the rail line to unload it directly from the train into the storage house.[337] The electricity to run the ice plant was not a problem, but the insulation was certainly not optimal.

There is no image of the Community Hall at Cherokee Bluffs/Martin Dam in the APC Archives, but there is a photo of the Jordan Dam Community Hall, which was similar. Please see the section on schools for more information on the Community Halls (Figures 4.61 and 4.62).



[337] DCC Progress Report, March 31, 1927, 89

Figure 4.46 The Community Hall, 10/8/1923.

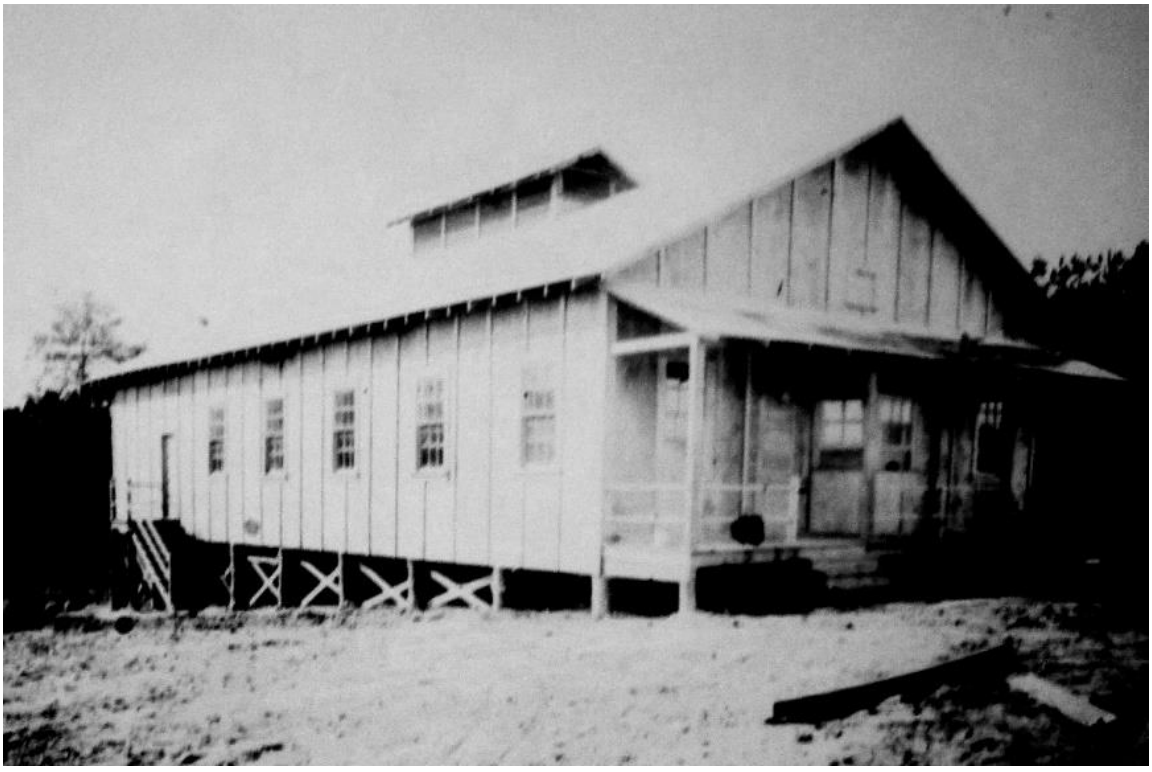


Figure 4.62 Jordan Dam Community Hall, 1927.

At Cherokee Bluffs/Martin Dam, the White employees' clubhouse was opened in April 1924 and designated Club House #1 to distinguish it from its counterpart, the Club House #2 for Black employees, which had been opened in January of the same year. Both clubhouses were furnished with pool tables, and drinks and tobacco were sold at standard prices. The management of both was like that of the commissary so the systems of payment and auditing were handled the same as the commissary. Even though the prices were competitive (or lower than elsewhere), the business was brisk and profitable. A captive clientele brought more than $ 70,000.00 in gross revenue in less than two years in operation. Poolrooms had to be licensed under Federal Tax Laws, and these were licensed

under the names “Cherokee Club” (White) and “Dixie Club” (Black.)[338] Perhaps one need not wonder that the numbered sobriquets were used in the camp.

4.3.5 Jordan Dam/Lock 18 (1926–1928)

Taking a big step toward autonomy at the Jordan Dam site, the Dixie Construction Company farmed a 300-acre site in Elmore County near the camp outside the town of Wetumpka to reduce expenses of operating the camp (Figure 4.63). In the summer of 1924, crops of oats, Irish potatoes, forty acres of cotton, and eighty acres of corn were harvested. Twenty goats were raised for milk and meat. The oats were intended to feed the mules, and corn on the cob was bound for the dining table; surpluses would be used or sold at a fair profit according to the needs of the camp. The cotton crop would be sold at a profit to the company. The farm was envisioned as a laboratory for experimental work related to farming methods and farm electrification. It was expected that the advances made would benefit the farmers of the state. (The APC had a policy of assisting the development of the state wherever possible.) Some of the fields were converted to pasture for the company mules during the times they could not be used or when mules became sick or injured on the job. Downtimes for the mules had been problematic in the past, but why sell injured or sick mules and then rebuy mules that might not be trained for the work? Turning them out for a well-deserved rest between jobs proved to be a sounder business decision. The farm was expected to supply not just one camp but many construction camps and was operated as “a practical business proposition” under an

[338] *DCC Progress Report*, March 31, 1927, 92.

agricultural student from Mississippi A&M, supervised by the Farm Demonstration Agent of Elmore County.[339]

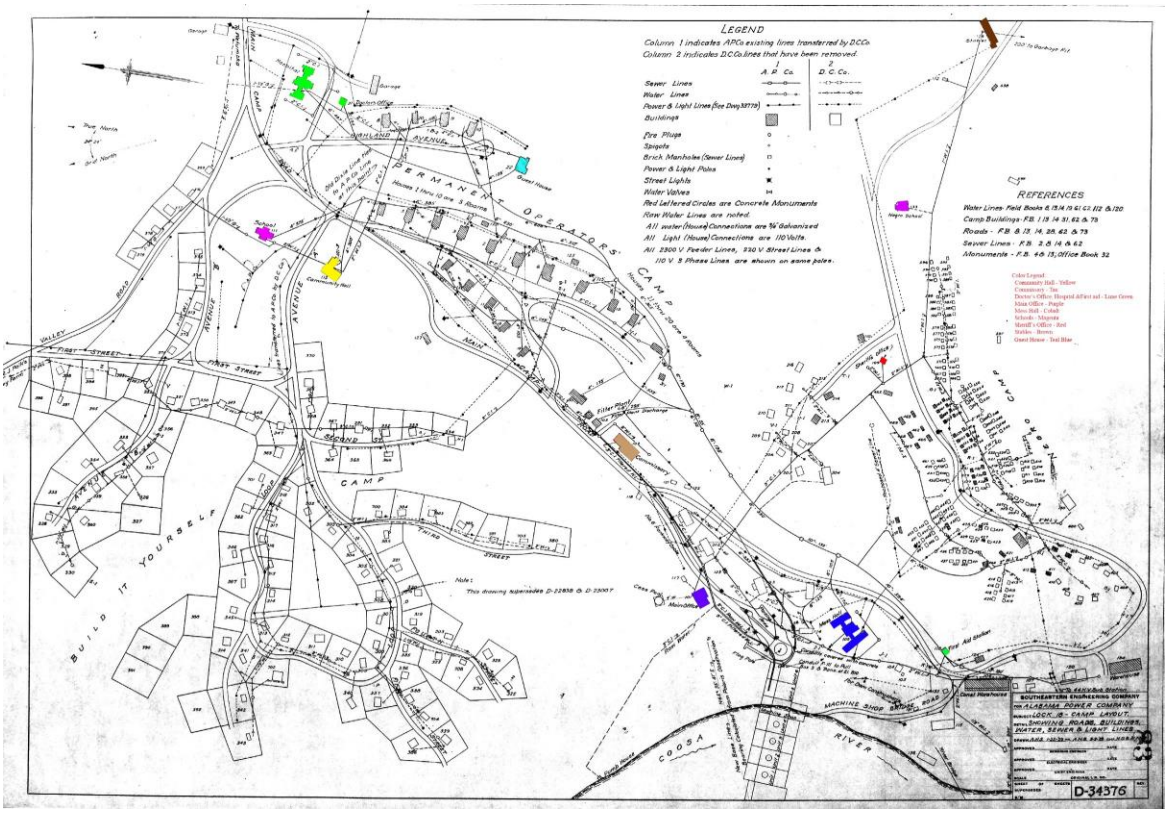


Figure 4.63 Color-coded Camp Layout of Jordan Dam modified by author from the camp plat D- 34376 in APC Archives. Mess hall - Cobalt blue Commissary - Light Brown Community Hall – Yellow Stables - Dark Brown Hospital and other medical - Lime Green School.

The mess hall at Jordan took a further departure from the previous versions (Figure 4.64). The axial alignment of the earlier dining halls was broken due to the unevenness of the topography always a complication of construction for the APC camps. The drawing (Figure 4.65) shows a rather generic plan, but in a smaller detail, the location plan shows the real condition of the landscape. Instructions note the mess hall is

[339] S. S. Simpson, "Dixie Construction Turns Farmer," *Powergrams*, July, 1924, 12, 40.

to be located with the central kitchen portion on the flattest ground, “while the two halls are placed to fit the contours.” The wings are shown detached so that adjustments may be made onsite while the construction is underway, a sign that the designers were by then understanding the worth of letting their plans be modifiable in the field.

Figure 4.47 Interior view of the Mess Hall at Jordan Dam 7-30-1927.

Much more information is conveyed in the Jordan Dam plan (Figure 4.65) than in the Martin Dam plan, which is rather schematic. (It is likely that the Martin Dam dining hall consisted of a new building but reused tables and benches from another site or saved from the fire.) The kitchen at Jordan Dam had a gable roof, and the two wings had shed roofs as did the porches, storage, and passageways. Shed roofs may have been felt to help

with air circulation, or the design decision may have been based purely on cost over aesthetics. The expected or planned capacity for the mess halls was 160 men on the Black side and 232 men on the White side. Note that the White mess has two stove heaters but that the Black mess has none. Was this a not-too-subtle attempt to keep the Black employees from lingering over their food or was it in the lee of the kitchen while the White side took the brunt of the cold winter wind? There is no note indicating a reason.

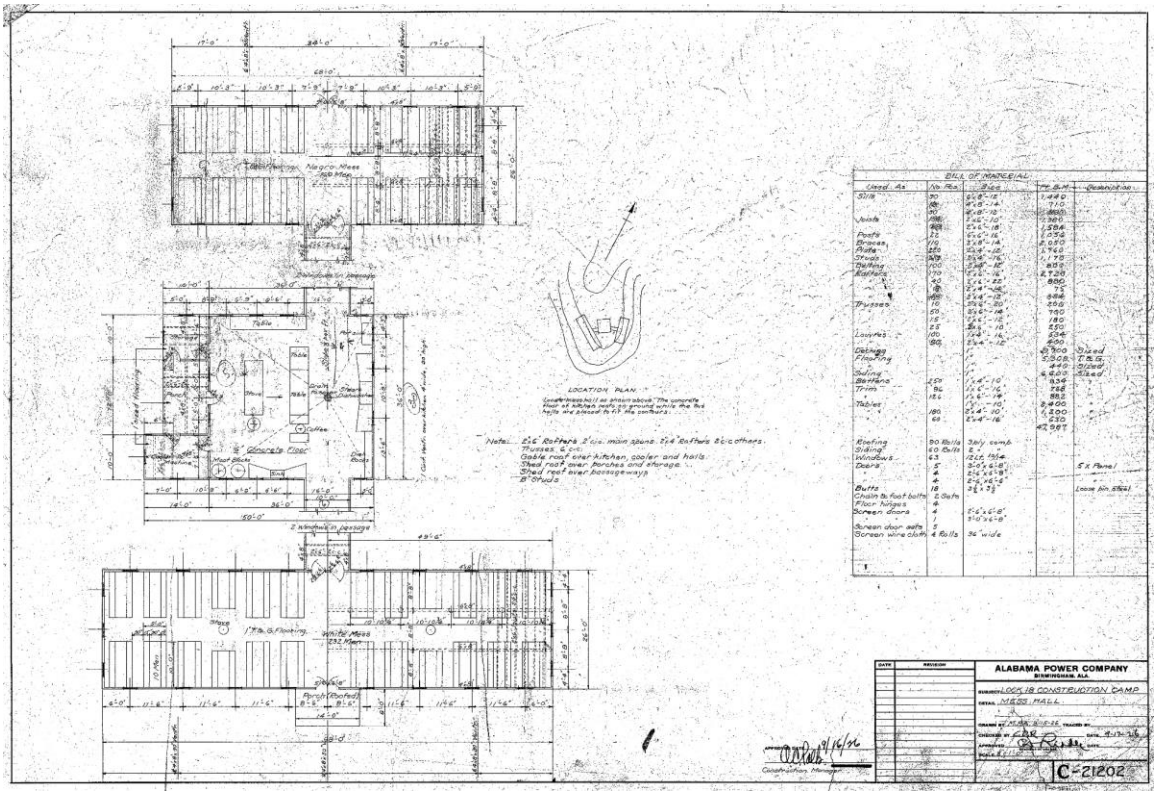


Figure 4.65 Lock 18/Jordan Dam Construction Camp Mess Hall 9-17-1926.

A safe space was maintained around the heaters with shorter dining tables located opposite the stoves. Ventilators (exhaust fans) were placed symmetrically along the shed roofs, three in the White hall and two in the shorter Black hall for cooling the air in warm weather. Screen doors and windows were provided for ventilation and fly and mosquito

control. There is a welcoming covered porch at the White entry, but the Black entry has no porch and appears to need stairs, judging by the topo identified as the "location plan." The hyphens connecting the wings to the kitchen are ten feet wide, an improvement over passages at Martin Dam that were six feet wide. They were shown detached from the kitchen so that the angle might be adjusted in the field. Waiters carrying trays of food would have found it much more comfortable to pass by each other in the wider space. The kitchen was sloped at 1/8" per foot from each corner toward a central drain so that the floors could be cleaned easily. All floors were one-inch wide tongue and groove except in the kitchen that was six-inch thick concrete, probably for both fireproofing and cleanliness. Mess hall tables and benches, doors, and windows were standard sizes. Rolled roofing and siding were asphalt-based.

The windows are fewer here at Jordan Dam, and they are not located just above the tables as they were at Martin Dam. Although there are still three windows along the short side of the halls, there are eight on each long wall in the White hall and six on each long wall in the Black mess halls. This time the windows do no occur above each table, but instead are placed between tables to allow more breezes to blow across the men's bodies rather than across the hot food. Certainly, it made for a cooler feeling meal during the hot summer months although perhaps the table was not as well-lit. This is probably another instance of learning by experience that was always improving the designs of the APC.

The commissary at Jordan Dam is similar to the one built at Martin Dam except that it is ninety-six feet long by thirty feet wide, a full twenty feet longer than the previous commissary and the layout has been altered to work with a more efficient model

(Figure 4.66). The changes indicate a change that was felt in the larger world of the time. Self-service grocers had only come into being ten years earlier at the Piggly-Wiggly in Memphis, Tennessee.[340] The company implemented the store checks policy, allowing buyers to budget (and pay) more easily. A new room was added for optional self-service, and a check-out counter in the room made it easy for the cost to be totaled and coupons to be exchanged. There was still a meat cooler of approximately the same size as the one at Martin Dam and a refrigerating machine, supporting a meat market room screened off from the rest of the space. This meat market was substantially larger than the one at Martin Dam at 10'0" x 14'0" with two service windows (similar to bank teller windows of today) for fly control. The meat market room opened to the self-service space. An "L" shaped counter ran in front of shelves with a two-foot-wide aisle for the clerks to navigate while assembling the customer's order in the larger room. Another small (16'0" x 7'0") space was divided from the main room by a counter where drinks, tobacco and other sundries were sold. Shown at the right end (in the plan above) are two spaces partitioned off (at ten feet high) with shiplap siding; the storage area opens to the outside with an eight-foot high rolling door, and an office (10'0" x 16'0") with two single-pane windows opens to the porch with two six over six pane windows on the gable end of the room. The office was also used as a post office, hence the two small windows opening onto the front porch. Construction of the Jordan Dam commissary commenced on September 29,

[340] I had heard that Piggly-Wiggly was the first to save costs by eliminating its clerks, but I went to the internet to fact-check my intuition. Sure enough, Smithsonian Magazine had published an article on September 6, 2017, and posted it online at https://www.smithsonianmag.com/smart-news/bizarre-story-piggly-wiggly-first-self-service-grocery-store-180964708/

1926.[341] The photograph below (Figure 4.67), indicates the rapidity with which the necessary structures were completed.

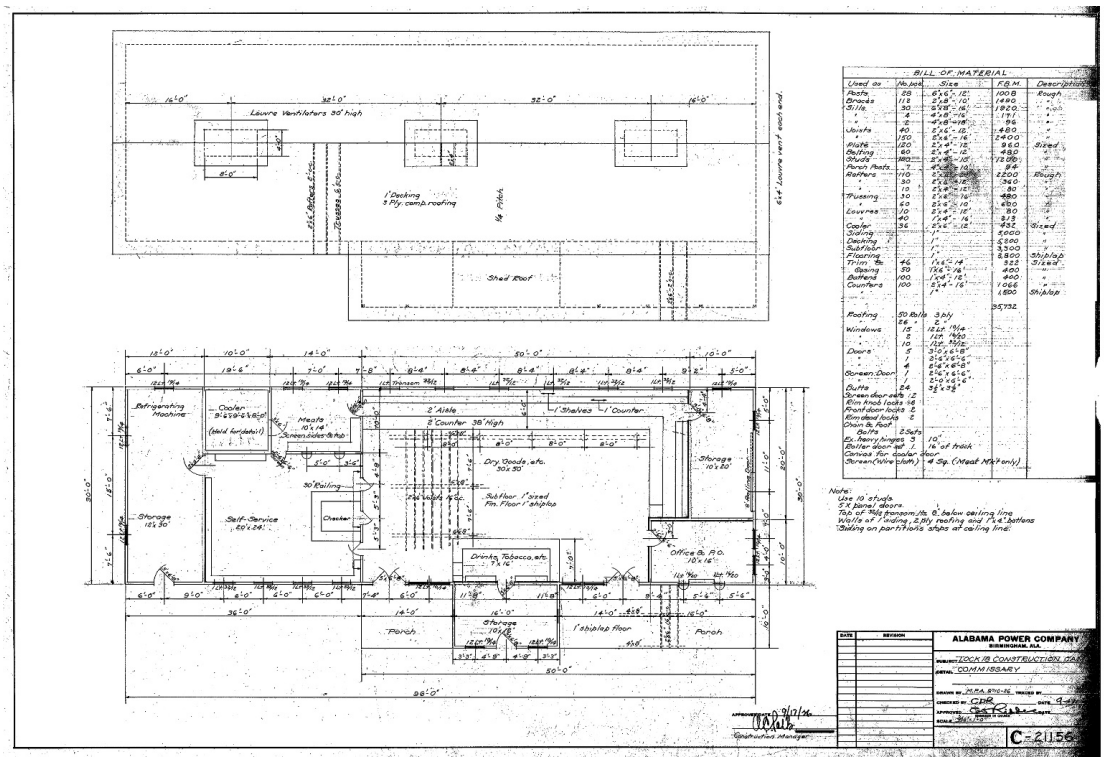


Figure 4.48 Lock 18/Jordan Dam Commissary 9-17-1926.

[341] DCC Construction Report Narrative, Jordan Dam, 1926–27. p. 173.

Figure 4.67 Commissary and Filter Plant (beyond) at Lock 18/Jordan Dam, 12-1-1926.

These windows and the rolling door can be seen in the photo. It was a balmy day, judging by the light jackets worn by the men lounging by the porch; however, the louvered ventilators on the roof ridge have been closed off for the winter, indicating that cold weather is expected before Spring rolls around again. The building was supported on piers, and the filter plant can be seen in the distance beyond the commissary.

There must have been an army of carpenters working at Jordan Dam in the fall of 1926. The weather became so bad in November and December that work on the cofferdam was stopped because of flooding. At the end of November, the carpenter force was reduced by forty-five men, but there were still many on the job because the work

continued on other structures such as the White schoolhouse, the hospital, community hall, and permanent cottages into January of 1927. With so many men to perform the work, and the simple nature of the structures erected, the time to completion was minimal.

The sanitation and first aid house were the first stops for an employee injured on the job; therefore, it was located as near as practicable to the work (Figure 4.68). The structure served two purposes. The first was emergency treatment for injuries, but more important to the camp, in general, may have been its function as the first line of defense against infectious diseases brought in from outside. Prospective employees were checked for health problems or contagious diseases such as malaria before they could be hired. The two-story house offered it a way to screen job applicants for communicable diseases without coming into direct contact with the sick or injured. This had been done previously at other camps, but here the separation is not on different floors but a segregation of the two examination rooms on the lower level (which are mirror images) by having separate entries. Also, the concrete-floored sterilizer room has its own separate door and open shelves for storage. A bridge from the upper ground level led directly into the waiting room giving access to the examination room and the office and quarters of the "first-aid man." Two double windows provide ample light in the examination room. The office and living quarters have one window on each exterior wall for cross-ventilation. The "first-aid man" has two steep staircases to get downstairs without having to go outside. Although the rooms are large and well-ventilated, the furnishings are simple. The 6''0" x 14'0" waiting room has a bench running around two walls with one side at six feet long. The first-aid house was placed to be able to quickly triage the injured and determine whether

an ambulance should be called to transfer the patient to the hospital or if he should be sent home for rest.

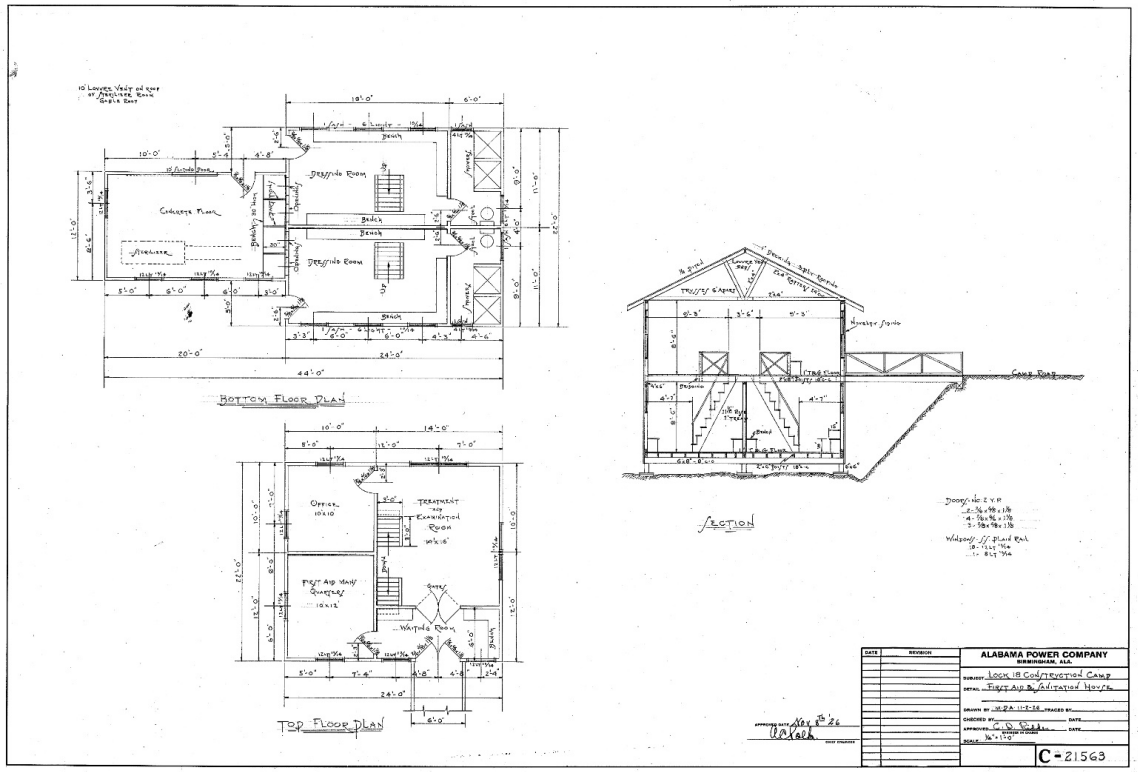


Figure 4.68 Lock18/Jordan Dam Sanitation and First Aid House 11-8-1926.

The Construction Office was the epicenter of production and payroll for the duration of the construction at Jordan Dam (Figure 4.69). This is the first time a construction office at one of the studied camps can be examined so thoroughly, but it can be expected that other camps had similar spaces for the same needs of the local management at the other sites. Offices for draftsmen, the superintendent, and assistant superintendent housed the daily operations for the construction decisions that had to be made daily such as changes made to accommodate field dimension adjustments or unexpected problems encountered as the work progressed. Having a dedicated pool of draftsmen also meant serendipitous upgrades were possible. It fostered the evolution of

better materials and methods that could be quickly incorporated into the work as APC planners and management learned (through experience) the best ways to complete the work.

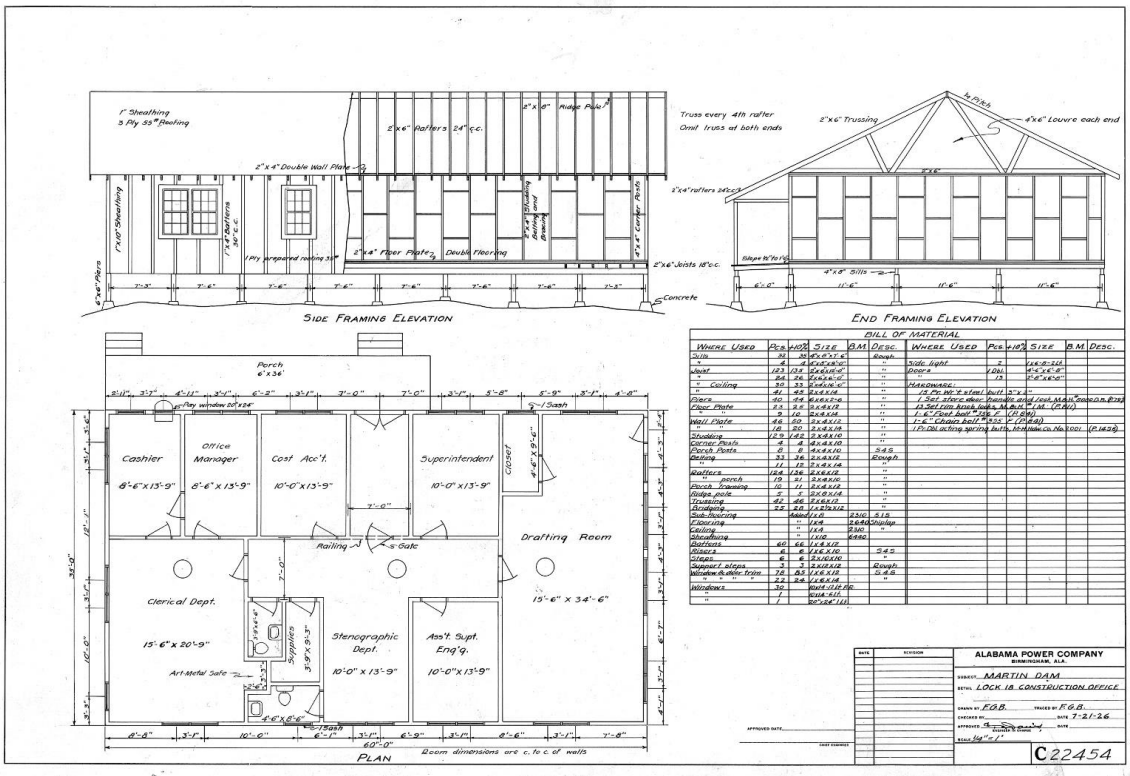


Figure 4.69 Lock 18/Jordan Dam Construction Office 7-21-1926.

Additionally, there were large spaces devoted to clerical workers and stenographers. A cost accountant, office manager and cashier assisted in the daily accounting of the costs and expenditures associated with material purchases, the payment of employees on a weekly basis, and the profits and losses at the company stores and mess halls. A large hallway opened onto the steno pool from the ample front porch. Although no seating or other furniture is shown for this space, it would have afforded any man who waited to see the superintendent or his assistant a more comfortable place to wait, provided he was allowed to pass through the rail that separated the front hall from

the various offices. The construction office was heated by three large space heaters placed along the central axis of the length of the building. Ventilation was afforded by double windows in every office through cross circulation (as long as windows and doors were left open.) Two toilets with lavatories were provided and several closets for storage of office supplies, including a niche for the "art-metal" safe to support the work of the staff. One closet at the front of the building has a small window for light. The cashier's office has, besides two doubled windows, a cashier's window with a pass-through to pay workers as they came to collect their wages.

As with all the other structures in the camp, the office building was built of rough pine on a sloping site for there was never much flat terrain to be found on the job sites. It was clad with 1" x 10" siding hung vertically and battened with 1" x 4" rough pine.

When the plan drawing (dated 7/21/26), is compared with the photo it appears that the siding was further protected with tar paper or rolled roofing on the outside, and since only one bricked chimney can be seen in the photograph (Figure 4.70), it appears that the three space heaters shown in the plan did not materialize. Draftsmen were not as likely to move around as much, and they couldn't be expected to produce quality drawings if their fingers were freezing, but the photo may be misleading. There might be chimneys on the other side of the roof ridge that are not visible in the photo, or space heaters were provided that did not need direct ventilation; in other words, electric ones were supplied for the other offices.

Figure 4.49 Main Construction Office, Jordan Dam, 12-1-1926.

The Lock 18/ Jordan Dam Hotel (Figure 4.71), was built to provide accommodations for office workers who vacationed at the lake on the weekends. The APC had recognized the benefits of offering the Birmingham and Montgomery offices the chance to enjoy the fresh air and sunshine at a small expense even forming a club for employees who wanted to swim or fish or hunt or party.[342]

[342] Please see the discussion about camp Mitchell in Chapter 5 for more information on the A.P.C. Club and in *Powergrams* under "A.P.C. Club Success Assured" *Powergrams,* February, 1924, 14.

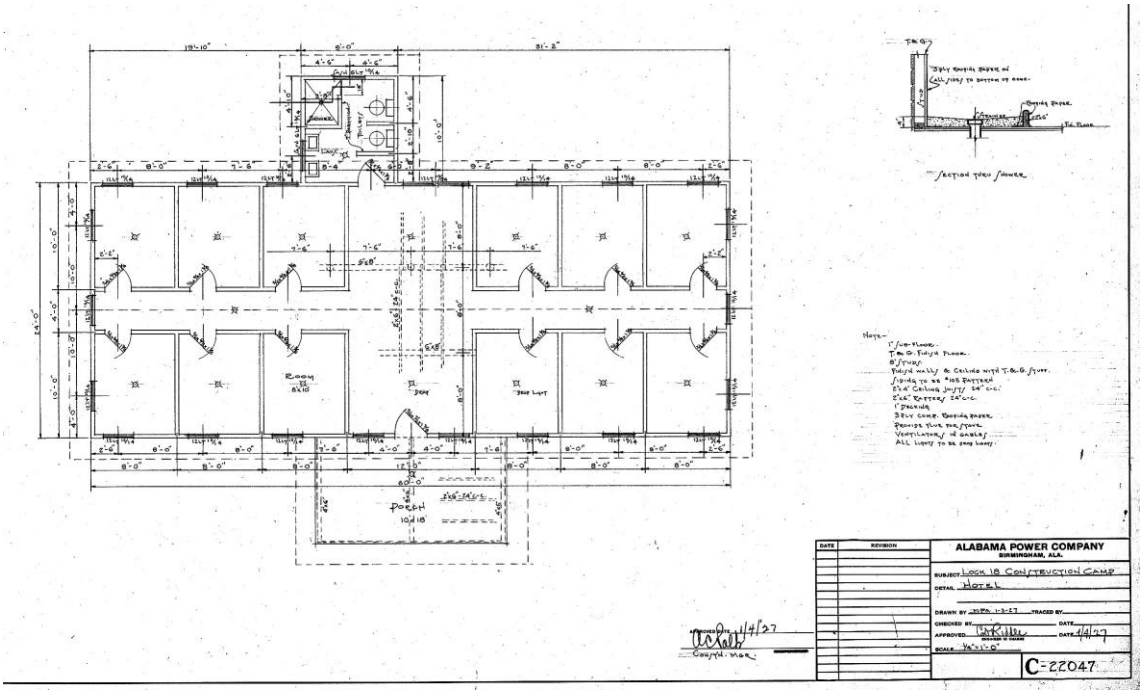


Figure 4.50 Lock 18/Jordan Dam Hotel 1-4-1927.

Since there is only one drawing for the White employees' bathhouse at Martin Dam (Figure 4.72), it is discussed here at the end of the chapter. The typical White employees' bathhouse was 24'0" x 38'0" with an interior height of 8'0" from floor to wall plates. It had an annex for storing coal 5'4" x 5'8" that was used to heat water for the men.

There are two shower compartments 21"0" x 5'4" with six showerheads in each compartment. To the side of the showers were four water closets and one ten-foot-long concrete urinal, which ran the length of the shower ends. There is not enough room to pass by the boiler at the other end of the building, but two entry doors were provided to access either side of the bathhouse. Another door at the uphill end of the building affords access to the coal house. It appears the division of space was not totally exclusionary

from one side to the other just less convenient than it might have been if the structure had been lengthened by a foot or two.

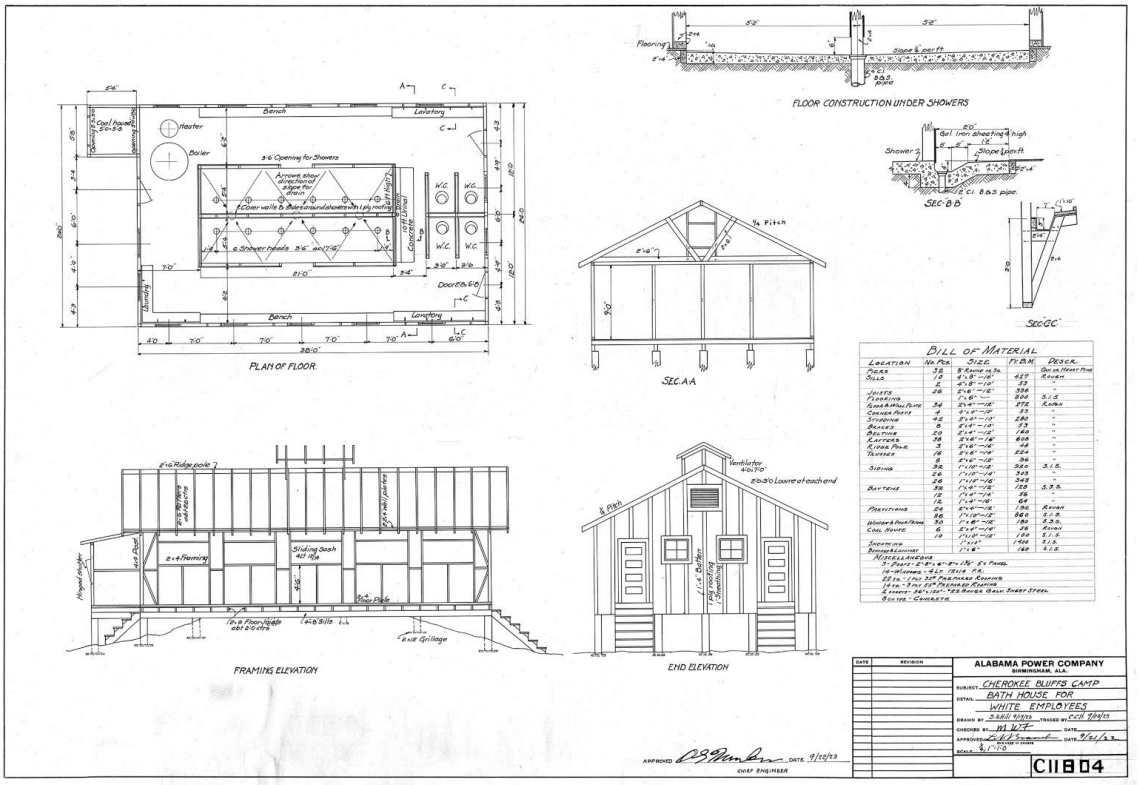


Figure 4.72 The White Employees Bath House, Martin Dam 9-22-1923.

The lavatories each had five faucets, so the men could shave ten at a time while others showered. The fourteen windows were sliding sash style, four lights, each 12” x 14”, so there was adequate lighting during the day, but the architectural drawing oddly shows no provision was made for electric lighting. The access to the coal bin was the full width and height on the interior of the bathhouse, so men had ready access to fuel for the boiler from inside, and there was a hinged shutter on the exterior to refill the supply.

The showers were concrete floored. This was made possible because the earth was mounded up under that area. The drop toward the corners of the bathhouse was enough

that four risers at the coal house end, and six at the entry end were necessary to enter the structure. The slope of the ground beneath the bathhouse would also provide for drainage to the sewer or to a downhill slope. A 4’0” x 7’0” ventilator in the roof was designed to allow the steam to escape and the presence of the boiler and hot water tank inside the bathhouse may have taken the edge off chilly mornings. The framing details are similar to other buildings in the camp with 35# roofing used on the walls to waterproof the shower compartments.[343]

The typical Black bathhouse was similar, though slightly smaller in plan and yet taller. At 22’0” x 32’0”, it had the same ventilator as the larger White bathhouse, but the wall height was 10’6” from floor to wall plate. There were four flush toilets and a concrete urinal, but only a total of ten showerheads in two shower compartments 17’’6” x 5’6”, and these were waterproofed only with two layers of wooden sheathing four feet high in the concrete showers. No mention is made of windows, though there is one 2’0” x 3’0” louvered ventilator in each gable end. The plan drawings do not survive, so the higher wall height might have meant that a gap was left above the eight-foot level for light to enter. Otherwise, the bathhouse was similarly equipped with two lavatories, a coal box of unspecified size, and a boiler and water heater tank of 300 gallons per hour capacity. Oddly, there is more information about the water heating equipment in the report for the Black bathhouse than for the White in the DCC Construction Reports. More telling is that the supports for the building are only natural log piers on 2” x12” footing

[343] *DCC Progress Report*, March 31, 1927, 62.

blocks. This clearly is not a structure expected to be needed for more than temporary use.[344]

At Martin Dam, there were sixty-five fire hydrants for fire suppression, but only four were located in the Happy Hollow and Shady Grove portions of the camp because these houses were owned by the employees, not the company.[345] Whether this is the first plan for fire protection in the camps is not clear since the records are not all extant.

Certainly, it is apparent that the APC planners have seen the destruction of fires in previous camps and have taken steps to alleviate the potential damage, but here, employees were not covered for any loss of their homes. However, these employees had elected to construct their own homes with materials supplied by the company, with the help of colleagues, and could do so again rather quickly.

The APC did not expect to have any use for these temporary structures beyond their life as housing and support structures for life in the construction camps. Once the dam was completed and put into service, there was no reason to keep the buildings or maintain the extensive grounds of the original camp. Some structures were dismantled and moved to other sites for re-use. Some were burned since that was the easiest and quickest way to remove them. A few were re-purposed or upgraded to become homes for the permanent operators who would live on the site where they could be on duty around

[344] *DCC Progress Report*, March 31, 1927, 63.

[345] *History of Construction, Book III, Martin Dam*, cover letter dated March 27, 1928, 76. This history of construction report was very revealing. Delineated in it were the job categories and duties of each supervisory position, the method used in laying out the camp, and the responsibilities of the design and implementation of each part of that layout. Supervisors were assisted by other men, but they were individually responsible for the outcomes so there was a sense of pride in the work and few mistakes.

the clock to adjust the electric power coursing through the veins of the high-tension wires along the service supply lines linking the source to the end-users of the state.

CHAPTER 5. APC CAMP DEMOGRAPHICS AND CONVERSION TO LEISURE ACTIVITIES

This portion of the dissertation examines the construction of the worker village and the hierarchical organization of the site to explain the financing, typology, inhabitation, and symbolism in the worker villages that reinforced and made apparent the prevailing political and economic customs of that era. Although generally described as serene and hygienic, the workers' living quarters are resonant with questions about the shared living spaces. What were the social implications of the bunkhouses? Were they more like college dormitories or army barracks or were they essentially flophouses? As one group of workers moved on to the next construction site, others moved in to perform different jobs. As the needs of the camp changed, several of the structures were modified or repurposed according to the desires of these different populations and the changing leisure-time activities Americans enjoyed as the economic conditions improved. The APC management realized an opportunity in this shift away from home family recreational practices that included exercise in the fresh air, camping, fishing, and swimming made possible by increasing ownership of a family automobile. Instead of destroying building stock that no longer had a dedicated purpose, why not invent a club for employees that would help defray the initial cost of the infrastructure and provide yet another way to keep employees loyal and happy?

5.1 Class and the Impact of Layout, Function, and Use

Writers such as Stuart D. Brandes,[346] Gerald Zahavi,[347] and Harvey H. Jackson[348] have discussed welfare capitalism and its dominant role in the worker villages of the early twentieth century. Welfare capitalism was certainly demonstrated in the worker villages at the dam construction sites as well as a paternal bias. Jackson wrote that the APC's "personnel policies also reflected certain class assumptions."[349] These policies included the idea that supervision was necessary for workers to behave correctly in their personal lives and to be productive in their jobs is confirmed by the usual placement of the Negro Camp between the workplace, the Sherriff's Office, and the Permanent Operator's Camp where the supervisors lived.

Race was an obvious distinction that separated classes or workers and the APC was careful to recognize that the needs of American Whites might be different from those of Blacks, Swedish, or Italian immigrants. Education level, income disparities, and ethnicity were also distinguished in the camps, marked with physical signs that anyone could read. Many of these assumptions are inappropriate by today's standards but typical of the rural American South until the Civil Rights Era, and unfortunately, they still hold sway in some parts of the United States. There are other kinds of segregation that damage

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[346] Stuart D. Brandes, American *Welfare Capitalism, 1880–1940* (Chicago: University of Chicago Press, 1976). Welfare capitalism refers to the practice of augmenting payment with other benefits, such as company supplied housing in model communities, health care, and pensions. Industrial paternalism might include non-cash compensation in the form of chits or specie, to be redeemed at the company-run store. This was a tactic some companies employed to keep their employees from spending their paychecks outside the company's economic base.

[347] Gerald Zahavi, Workers, *Managers and Welfare Capitalism: the Shoemakers and Tanners of Endicott Johnson, 1890–1950* (Urbana, IL: University of Illinois Press, 1988). Dr. Zahavi also has published extensively online and on the air with his weekly program, *Talking History*.

[348] Harvey H. Jackson, III, *Putting "Loafing Streams" to Work, the building of Lay, Mitchell, Martin, and Jordan Dams, 1910–1929* (Tuscaloosa, AL: The University of Alabama Press, 1997).

[349] Jackson, 9

our country, including but not limited to the gentrification of inner cities that forces homeowners to sell and move because of skyrocketing taxes. We must become more inclusive as the world grows smaller and more densely occupied.

In Birmingham, as companies built new plants on the city's fringes, the workers moved away from the city center to be closer to their workplaces. These neighborhoods continued to reflect and reinforce the racial, occupational, and ethnic divisions of the workplace. Henry McKiven wrote convincingly about Birmingham's iron and steelworkers where some companies financed and controlled "industrial suburbs" and ensured that workers maintained their domestic havens by instructing them and their families in "domestic science," and inspected their homes to make sure the lessons were applied. In Chapter 8, McKiven showed that the companies increased their control over worker's lives with strategies designed to create efficient and loyal workers. He demonstrated that the fear of the influence of saloons and brothels on Black workers was uppermost in the minds of management and owners and that company sports teams were implemented to teach employees the importance of cooperative effort and to foster pride in the company. Industrial league games attracted large crowds of employees eager to see their teams succeed, proving the teams did much to develop company "spirit." Companies also built churches, community centers, and playgrounds and held company picnics and barbeques, expanding their influence over employees' leisure hours far beyond what had been usual during the nineteenth century.[350]

[350] Henry M. McKiven, Jr. *Iron and Steel: Class Race and Community in Birmingham, Alabama, 1875–1920* (Chapel Hill, NC: University of North Carolina Press, 1995), passim.

Outside the South, segregation was also practiced. In the Ohio River Valley, the dam tenders' houses of the United States Army Corps of Engineers (USACE) also displayed a hierarchy although this was more often military than racial because there were no Black Corps officers during the late nineteenth and early twentieth centuries. Though hired laborers were racially mixed, there was a definite division of labor along racial lines in the northern states. This segregation of laborers also was the standard of those days. Social inequities are not the focus of this dissertation, however, so the topic will not be discussed in depth here. What will be discussed are the hierarchies of White workers' job classifications and the allocation of space for the workers' housing. Viewed from the perspective of space usage and formal composition since these are the areas where differences are most evident, a case will be made for a less aggressive demarcation of classification by job category. Certainly, the APC devoted the best services and facilities to the higher-paid workers, but they also made concessions for those working the unskilled and lower-paid jobs. Men were paid according to their skills and the type of job they were to perform, another way of differentiating the status of employment. Payroll information contained in the monthly and yearly reports corresponds to the type of housing afforded the employees of the APC and the duration of their contracts with the company. However, APC employees were able to move to another house if it became vacant and they could afford it, so there was some autonomy afforded the employees when conditions were favorable.

Thousands of employees were at work at each site although not necessarily all at the same time.[351] Even for rough jobs like clearing the land, the APC employed crews

[351] *DCC Annual Report for Jordan Dam, 1929a*, 32–33.

trained for specialized jobs, and these crews moved from site to site instead of taking on other tasks for which they might not have been trained. This optimization of the labor forces permitted the rapid construction of the dams and coincidental improvements to local infrastructure. Still, given the time and place of the work, racial inequalities were certainly present, but it is not within the scope of this dissertation to dwell on this subject. Welfare capitalism with its paternal bias was also obviously demonstrated in the worker villages. It is important to understand that race and ethnicity were distinctions that separated classes of workers, and the APC was careful to recognize that the needs of American Whites might be different from those of Blacks or, indeed, Swedish or Italian immigrants.[352] The architectural analysis of housing and other structures at APC construction sites reveals many of their assumptions to be inappropriate by today's standards, but typical of the rural American South until after the first half of the twentieth century had passed. The APC's "personnel policies also reflected certain class assumptions," according to Harvey Jackson.[353]

5.2 Spatial Organization of the Camps

There are patterns of similarly constructed homes seen in the worker village at Jordan Dam, which is used to begin the discussion here since it is the most completely mapped camp with the others not having extant site plans or only partial ones. The other camps followed similar patterns because the camps were all hilltop sites near a large river that would rise as the dam began to impound water behind it. Flooding was expected, so only work that had to be performed at lower elevations was done in these areas; no

[352] Jackson, *Putting "Loafing Streams" to Work*, 11.

[353] Jackson, *Putting "Loafing Streams" to Work*, 9.

structures except the most temporary shops or offices would have been built below the eventual waterline.

At Jordan Dam, wooden frame bunkhouses were grouped together, and groups of eight smaller houses were clustered together along the main road in the Negro Camp. A few family houses for Black families were scattered in groups around the "shacks." Up the hill were the larger bunkhouses for the White engineers and clerks also arranged along cul-de-sacs in the Permanent Operator's Camp. Still higher and more remotely located from the work areas were the single-family homes in the "Build-It-Yourself" Camp. These were spaced on generous lots located on cul-de-sacs nearest the public road but are planned to be more temporary than the permanent operator's camp. Although the topography in each camp differed producing different spatial placements from camp to camp, still there were similarities throughout.

Although the Jordan Dam plat contains no topographical information, it is reasonable to assume the land rises from the river to the ridge behind the camp (Figure 5.1). A site visit (and even a quick glance on Google maps) confirmed this. Dams by necessity are constructed where there is enough elevation on both sides of a river to restrict its flow or impound the water behind a dam. Ideally, the river cuts through a gorge steep enough that the dam can be built with the minimum length necessary to hold the water within the natural basin formed by the surrounding hillsides. Surveyors and scouts searched for just such conditions during the late 1800s. (William Patrick Lay, son and grandson of riverboat captains, knew the Coosa River well, so he was able to identify the best locations to build dams to produce hydroelectric power. This was the reason he was and is considered the father of the APC.)

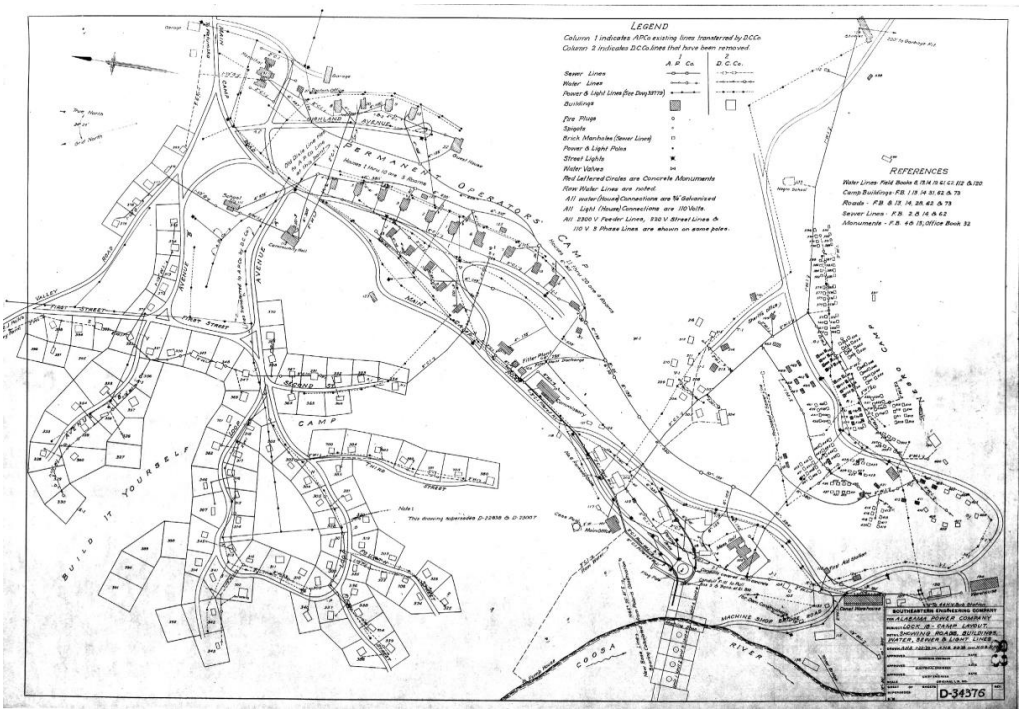

Figure 5.1 Plat of Jordan Dam Camp.

In an unusual move, the company split the working and living arrangements at Jordan Dam. Most camps were concentrated as much as was comfortable so that the men could be close to work and could be called upon in emergencies to help put out a fire or shore up a dike in a flood. The camp at Jordan Dam was located on the east side of the river since it was there that the shade trees and availability of well-drained ground were found. The river flows southward at this point so that the White camp was on the upstream portion of the river from the dam and the Black camp was downstream of the dam. Was there an intentional racial or job hierarchy visible in this placement along the river, or was it simply a matter of separating the worker groups? The construction reports are not specific on this matter. It is not an unusual arrangement for the APC camps or for other camps in Alabama and around the country at that time. Surveillance is more

practical when groups are tightly spaced within fenced boundaries, especially if there is only one gate through which laborers walk to work and then back home each day.

Ghettos in Europe practiced this same sort of "othering" so prevalent in the American south. This was a standard method at the APC camps for ensuring that the Black laborers did not fall prey to bootleggers eager to sell moonshine but also to keep them in camp at night and away from the White camps. There probably was more concern about maintaining the cleanliness of the White camps, which were often put on display for visitors. The Black camp did not have sanitary sewers or water lines running to every home, and there does not seem to have been much interest in lawns or gardens in the Black camps fostered by the company. One other reason for the lack of beautification efforts here was that the Black laborers' jobs were of the shortest duration and there was not much investment in infrastructure that did not offer any long-term advantages for the company.

All the APC camps offered, in addition to options for housing, amenities needed to support the workers and their families. The churches were the focus of community life, more so for Blacks and Italians than for other groups, and at the same time, the regulation of saloons and drinking was a huge challenge for all employers. McKiven found that company welfare programs always deepened existing divisions within the workplace. For him, the evidence suggested that occupational, racial, and ethnic divisions in company towns reflected the workers' own preferences. After all, by the 1920s most workers lived in independent neighborhoods self-segregated along occupational, racial, or ethnic lines, and they created institutions that reinforced those divisions.[354]

[354] McKiven.

In the White and Black APC camps, a variety of programs was instituted and community services were expanded over time as the APC learned to manage their workers' lives with less obvious means. Reading groups, sewing clubs, and community events were encouraged. The residents also began gardening and hunting clubs, and Clean-Up campaigns were held yearly to impress on newcomers the importance of personal health and hygiene, and recreational clubs to sponsor competitive athletic events. The importance of centers for community life resulted in permanent structures that were flexible enough to be adapted by the residents for a variety of functional needs.

Like the typical APC site plan, although with differing climates and topographies, formal typologies were established in the 1930s in California migrant worker camps. To accommodate the seasonal rise and fall in numbers and continual turnover of residents, a permanent institutional core was constructed and surrounded by impermanent dwellings. Meeting the challenge of integrating these two elements evolved from a central community facility containing showers, laundry, and flush toilets surrounded by orthogonally laid out "streets" of tent sites in 1935. The difference between these camps and the early phases of an APC camp is primarily in the straightness of the roads. In Marysville, California raised platforms for the tents were constructed, with shade arbors and additional sanitary units, an assembly room, and nursery along with recreational areas, playgrounds, and some landscaping were added.

Only the camp personnel occupied a permanent dwelling located near the gated entrance, which allowed for monitoring and control.[355] At the APC camps tents on raised

[355] Greg Hise, "From Roadside Camps to Garden Homes: Housing and Community Planning for California's Migrant Work Force, 1935–1941," in *Gender Class and Shelter, Perspectives in Vernacular*

platforms had been used by the forest clearing crews when they got closer to the dam construction sites, and sometimes Black laborers were housed in this type of tent in the construction camps. The migrant worker camps were like the APC camps in that the community facilities were more permanent than the ephemeral shelters of the temporary workers as is illustrated by the rehabilitation of some houses and other structures by the APC for recreational use.

5.3 The Roles of Women in APC Camps

Jacquelyn Dowd Hall has written that the studies of social history in the 1960s and 1970s were about race but not about class or gender.[356] Other historians tended to categorize by geographic regions (i.e., studies of the South typically were concerned with that which was "Southern" and rarely considered gender or class). Some wrote on women in the South, but they were restricted to stereotypical categories of slave-holding White mistresses and Black slaves because there simply was no literature on the subject although there was quite a bit on Northern working-class women. Women in the South have thus largely been described in terms of their relationship to race.[357] When women did begin to be included in the examinations of southern textile workers, they were conflated with children,[358] or all mill workers were lumped together into the single category of mill hand where generalizations were made across the board. It was not until

Architecture, V. edited by Elizabeth Collins Cromley and Carter L. Hudgins (Knoxville: University of Tennessee Press, 1995), 243–258.

[356] Jacquelyn Dowd Hall, *Like a Family: the Making of a Southern Cotton Mill World* (1987), 10.

[357] Hall, *Like a Family*, 10. See also: Jacquelyn Dowd Hall, Robert Korstad, and James Leloudis, "Cotton Mill People: Work, Community and Protest in the Textile South, 1880–1940" in *American Historical Review*, Vol 91 Issue 2 April 1986, 245. And Mary Eleanor Wichersham and Robert P. Yehl, "The Cotton Mill Village Turned City: A Retrospective Analysis of Three of Georgia's Smallest Cities", in *Journal of Urban History*, 2014 Vol 40 (5) 917–932.

[358] Hall, 11.

the middle 1980s that a reassessment of older views produced an awareness of the gendered roles of women in textile mills.[359] It was not until the late 1980s that *Like a Family: the Making of a Southern Cotton Mill World* (1987) by Hall and her colleagues at UNC that analysis of work based on gender differences, and the generalization of the independence or docility of mill workers is abandoned for the closer examination of whether millwork "empowered the workers depending on whether they were male or female."[360]

We get only glimpses of the roles of women in the archives of the APC mostly in articles published in *Powergrams*. Until the 1930s, women typically only worked if they were unmarried and quit when they did marry. Some held clerical positions or were schoolteachers as it was mostly wealthy women who had higher education opportunities. The women who worked for the APC were usually office workers who lived in cities like Birmingham or Montgomery, the state capital. Most women living in the camps were wives of working men and tended their houses, raised the kids, and prepared meals for their husbands the same ways women in cities and towns did. Black women living in the camps did the same and took in washing and ironing to make a little cash. At Jordan, we know the operating staff included at least one Black female nurse because she is shown in a photograph published in Powergrams.[361] However, it is very unusual to see a Black person's photograph in that magazine in the 1920s and 1930s.

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[359] Hall, 12.

[360] Hall, 13–14.

[361] M. S. Whiteside, "Jordan Dam Hospital," *Powergrams*, December, 1927, 6. "Operating staff at Jordan Dam Hospital are two physicians, a superintendent, negro nurses and orderlies and a cook." The attendant photograph shows a Black female nurse.

White women in the camps were not always at home. The Ladies Walking Club was founded at Gorgas by Mrs. R.H. Deitz, Mrs. Cecil Lyle, Mrs. H.W. Dillin, Mrs. J. K. Davis, and Miss Anyce Maxwell. They must walk at least four miles per day and new candidates must run a two-mile footrace to be considered for membership." They planned to stage a hill-climbing contest.[362] Women could be active and certainly were by the days of the ALAPOCO Club where swimming, hiking, horseback riding, and other activities were offered to vacationers who visited on weekends. The visits were often more than recreational; there was a component of company retreat where members of an office could share experiences away from work and home so they could become more bonded.

Not all the women living in APC camps were married. The widowed sister-in-law of James Mitchell was employed at the camps after the death of her husband. She came to Gorgas after working as a matron of the dining halls at Jackson Shoals and Lock 12 during their construction.[363] Renowned as a wonderful cook, Mrs. Mitchell ran the camp dining halls and served guests of the directors as well as the working men. More information on Mrs. Mitchell can be found in the section on dining halls in Chapter Four. We also have a photograph of a Black nurse attending the sterilizer at Mitchell Dam circa 1923 in the discussion of hospitals in the same chapter. Although it may be assumed women were employed as nurses or worked as cooks in the mess halls, the record does not define the genders or names of the cooks on extant payrolls.

Royce Northcutt in *I Remember Gorgas* recalled several female schoolteachers. The archives include only intermittently retained payroll logs. The teachers often were

[362] "Gorgas is a Leader Among Societies," *Powergrams*, April, 1923, 37.

[363] Northcutt, 33.

supplied by the state of Alabama in a partnership that ensured a qualified teacher was present and that the curriculum standards were met. Northcutt cites an entry in the *Powergrams* of October 1921 that announces that Mr. Waldrop is the new principal, assisted by his wife, Mrs. Lenore Gore Waldrop, and Mrs. A.S. Jones as teachers. Mrs. Jones must have been the first teacher at the APC school in Gorgas as she taught there during the 1920–1921 session while the new school was under construction.[364] The school at Gorgas was funded and constructed by the APC, Winona Coal Company, and Walker County, so the teachers at Gorgas were undoubtedly employed by the county. Students from outside the camp were always in attendance. Black children attended school in county schools outside the Gorgas camp. Northcutt also recalls that because of the company's support of the school, it "was able to secure and retain the very best teachers."[365] There was no full-time janitor.

Northcutt also recalls other teachers such as Miss Lois Faught, who bought the company house in which she lived after she retired,[366] Mrs. Bernice Lawson, an elderly widow, Miss Evelyn Jones, the daughter of the camp doctor, Mrs. Wales Kindley, whose husband George worked at the steam plant and was the scoutmaster, Miss Garrison, who worked as a substitute, and Miss Melva Deason. Northcutt's mother worked preparing school lunches assisted by Anna Lou Kimbrell.

Northcutt remembered a "very large Black man named Gus" who was the chief cook after Mrs. Mitchell retired. He does not remember where Gus lived, but it must have

[364] Northcutt, I Remember Gorgas, 45.

[365] Northcutt, 47.

[366] Northcutt, 49.

been at Gorgas because the cooks also prepared box lunches to sell to the residents. In a letter, C.O. Lineberry, superintendent of the Gorgas camp, wrote in June 1933 to a Mr. Leroy Price asking him to "handle the work" at the dining hall where "William" is the head cook because there have been complaints on the quality of the food.[367]

Women in the camps might write the news and gossip and have it published in Powergrams. The "Western Division News" was written by Miss Clara Kaufman in 1921, 1922, and 1923.[368] Helen Bethea was editor for the *Powergrams Editorial*, published quarterly by employees of APC. (W.J. Baldwin was Editor-in-Chief.)[369] Other women worked in an array of office employment. Marie Ginn, was a District Auditor, Louise Hale, a Cashier, Ruby McCarroll, and Minnie Kay were Stenographer-Clerks; Evelyn Dodson was a Home Economist and Marie Faherty was a Home Lighting Specialist. [370]

Office workers included women in stenographer pools and as telephone operators, certainly, but women also excelled in sales. Women employees established an enviable record. Miss Blanche Beall, followed by Miss Bouchelle, led the "feminine contingent in the Third Annual Preferred Stock Campaign. Out of about 13,000 shares sold, the women sold one-tenth, remarkable since there are only 110 in the entire organization." They averaged over 12 shares each, much higher than the men. Beall sold 117 shares and

[367] Northcutt, 34–35.

[368] Western Division News, *Powergrams*, January, 1921, 8. Miss Kauffman continued to write this column for several years, through 1923 at least.

[369] *Powergrams*, December, 1927, 10. There were four issues of *Powergrams* in 1927 and 1928. They came out quarterly.

[370] *Powergrams*, December, 1928, 1.

Bouchelle 103.[371] The APC was selling stock in the company to employees on easy terms, to be deducted from their paychecks, and to outside investors, as well, through campaigns of phone calls and speaking opportunities at women's and men's clubs around the state. Women often proved persuasive, especially where kitchen appliances were on sale. More women were attending colleges by the 1920s than ever before. They were getting out and traveling alone to work out of their offices in town, calling on smaller town groups and women's clubs. They were knowledgeable on the subjects they spoke about, and other women looked to a woman who had experience in cooking on an electric stove, for instance.

Women attended meetings in clubs modeled as sisters of larger men's clubs. An article on the Women's Public Information Committee in Montgomery relates that Mrs. Pratt "knew all the important points on dictating a letter" and her speech before the junior engineers of the company also included a lesson on how to handle an accident such as an electrocution. "It was interesting as well as embarrassing to note just what procedure and disposition of this case would have been made by the junior engineers, as well as by older employees, and brought forth much laughter. We were impressed also by the fact that a stenographer was truly a specialist in a very important field, just as an engineer is to his line of work."[372]

Home economists who graduated from Auburn University went to work for APC. "Miss Adelia Gaboury, the very attractive Home Economist of the APC, spoke

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[371] Thomas Bragg, "Women Employees Establish an Enviable Record," *Powergrams*, March 1924, 15.

[372]"Women's Public Information Committee," Powergrams, March, 1925, 38. The words spoken by this author may not have sounded so condescending at the time of the publication.

of home economics work being done throughout Alabama and the extensive and inspiring field open before her for lessening the drudgery of home keepers in their household work by the use of electrical appliances. The meeting was then brought to a close by Miss Lee with the announcement that in the near future an electrically cooked luncheon will be prepared and served jointly by the women of the APC and the B.R.L. & P. Co. to the employees of both companies. This in response to a request from the male employees of these companies that they would like a practical demonstration from the women of their accomplishments in this line."[373]

Contests were organized to promote sales among sales representatives. "Home economist Miss Gaboury will be assisted by reps from all the manufacturers and will begin by actual demonstration and educational talks before various clubs along with advertising in streetcars and windows, circular letters and newspapers."[374]

Again, "Miss Adelia Gaboury, range demonstrator for the Company, was in Jasper the 23rd and 24th giving demonstrations each day. We were very fortunate to have her with us and feel assured that with the help from her we shall accomplish wonders in our range campaign." "The recent range campaign got away to a good start in Jasper, as two all-White Westinghouse ranges along with a 515 A-16-80 Crawford range were sold the first week." "Mr. L. P. Miller and his crew of city workmen have been quite busy lately connecting electric ranges, on which they have proven themselves very efficient." Miss Gaboury had a colleague along that week; "Mrs. Yennie, demonstrator for the

[373] "Open Meeting of W.P.R.C." *Powergrams*, June, 1923, 31. Let's hope the men were buying the groceries for the women to cook.

[374] "Electric Range Campaign Now On," *Powergrams*, July, 1923, 14. Introduced plans for an extensive contest to see how many ranges could be sold in this first campaign for the company

Company, spent a week in Jasper and most successfully demonstrated the Rotarex Cook-rite."[375]

Not only were women better in their convincing cooking presentations, they were acknowledged masters of home décor and were placed in situations where they could do the best for the company. All these women were affiliated with the office workers in the home office in Birmingham or in branch offices; they did not live in the camps. However, they were frequent visitors to "Camp Mitchell" an employee-only holiday and weekend get-away provided by the company after the village at Mitchell Dam was no longer used for the families of construction workers. Although these women were probably not acquaintances of any camp women, they may not have been socially far removed from the wives of engineers and management living in the camps. Women in the camps did keep in touch with those they knew in towns where they had once lived or those they had met while living in other camps. The APC expected to cement relationships with the women who worked in the Birmingham and local offices with the women who worked and lived in the camps as another form of team building. The frequent articles about camp visits and the interactions with camp visitors probably did allow women who might have enjoyed the social aspects of living in town and those who were not able to make the trips to participate vicariously.

Typical information might be related thusly: "Mrs. Sholz of Mitchell Dam has been spending a few days with Mrs. Benziger. Mrs. Christian of Anniston has

[375] "Jasper District News," Powergrams, June, 1924, 29. The Cook-Rite brand is still around. The Rotarex sounds like it was a barbecue grill with a rotating spit and that is what is advertised today by Cook-rite. https://www.amazon.com/stores/CookRite/CookRite/page/30B22FEB-90F7-42AF-9DBF-05D9CB1B32BB

returned home after spending a few days with her son, Mr. George Christian."[376] Or: "In Albany, Mrs. Wm. Foster underwent an operation for tonsillitis (sic) recently, but has entirely recovered and left Billy to look out for himself for a while, which he doesn't seem capable of doing, as he stays out until 2 am going frog gigging."[377] Or "Leaving Mitchell Dam and going to a new job at Tallassee Dam, is Mr. H. J. Derivan and his wife the former Miss Eleanor Hall, technician at the hospital. Mrs. Naomi Lloyd Howard is back at her desk in the Casualty Department after an absence of several weeks on account of illness."[378] And:" Mrs. J.M. Black is visiting friends in Gadsden. During her absence, her illustrious husband, "Bud" Black, with R.H. Deitz and Ustic Reed are doing construction work. They are building a garage for their cars."[379]

The information is succinct and interesting even to those who may not know the people named. It conveys the message that "we are all leading similar lives" and "we have much in common." This can really build a sense of team pride, especially when children are concerned. For instance, "Mrs. Christopher, who has spent the summer camping at Lock 12 returned to Gadsden to put her two children Norton and Katherine in school there. Miss Mildred McWhorter returned to Birmingham to complete her school in a few months. Miss Betty Lakeman entered high school at Clanton. All the other children of school age are attending Lock 12 school."[380]

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[376] "Over the Fence," *Powergrams,* June, 1923, 30.

[377] "Over the Fence," *Powergrams,* June, 1924, 30.

[378] "Over the Fence," *Powergrams,* June, 1923, 21.

[379] "Over the Fence," *Powergrams,* June, 1923, 29–30.

[380] "Lock 12," *Powergrams,* October, 1922, 6.

In February 1924, an article in Powergrams announced the transfer of Mr. Paul M. Collier from the telephone department to Mitchell Dam camp where he would be put in charge of the APC Club's property. His wife, Mrs. Collier, was experienced in hotel and café management and so would sell meals for thirty-five cents each or a dollar per day. Mr. Collier would also operate a bus transport from the camp to Verbena and back again. "Two colored helpers, a thoroughly dependable man and his wife, have also been engaged to assist," and Mr. Collier had received a concession to operate a store. There would be a new clubhouse, a 26-foot boat had been purchased, and the lake stocked with a mix of fish.[381] Both Mr. and Mrs. Collier must have stayed very busy in warm weather.

Powergrams could be likened to the Facebook and Text Messaging platforms we have today since it was a way to circumvent the use of the telephone, which was not available everywhere and had problems with interference when the transmitting lines were placed too close to electric service lines. The APC had experimented with "wireless" telephones for this reason. An electric power plant generates too much current for 1920s phones to have worked well in any location near the plant. The APC used the gossip and announcements to further its team-building efforts so that a more homogeneous and therefore more easily managed group of workers would result.

However, one woman was certainly an anomaly. Seventeen new engineers who graduated from Auburn University (Alabama Polytechnic Institute) in 1923 were hired to work for the APC. As the first female electrical engineering student to graduate, Maria Whitson of Talladega was immediately hired by the APC as an engineer and given a prominent write-up in the March 1923 issue of *Powergrams.* Clearly brainy and very

[381] "A.P.C. Club Success Assured," *Powergrams*, February, 1924, 14.

pretty, Miss Whitson chose the APC over offers from General Electric and Westinghouse, but she did not last long in the engineering department. Either she married and quit working outside the home, or she moved on to another job, for she does not appear again in *Powergrams*.[382]

5.4 Blacks in APC camps

In the APC camps, Blacks were literally not seen. Their camp was always placed as far away as practical, and their work and meals were the only times they routinely met with White workers. Even the Black men, who maintained the camps, cutting grass, picking up garbage and trash, or doing odd jobs would not often be involved in a meeting. It would more than likely be Black women who interacted with Whites in the camps for they worked as laundresses for the single White men, and perhaps some Whites employed them as maids or housekeepers. They would not have been on the company payroll so it is difficult to know, but even White women of little means could still afford the pittance paid to a Black housekeeper in the New South.

They are not represented in the literature (*Powergrams* and DCC Reports) except as the butt of jokes or as the victim of accidents, and they are always so stupid and so brutally strong they recover faster than Whites, almost cartoon characters. If Whites were uncomfortable with racism, perhaps this was an effort to make them a little more at ease with their contemporaries. The APC of today would never allow such representations of Blacks to be published or even spoken publicly without repercussions of some sort. The 1920s and 1930s were times when these

[382] "Alabama's First Woman Electrical Engineer Employed by A.P.Co.," *Powergrams*, March,1923.

practices were common and understood by most people as perfectly fine if they did not occur face to face. However, some continued to be more combative and aggressively argumentative in their class-based interactions with Blacks. Those who were worried that they could be replaced by upwardly mobile Blacks might be driven to tactics such as name-calling, prank-playing, or, worse, actual violence. Even some *Powergrams* issues include "jokes" that denigrate Black employees.

As mentioned previously, there were instances when Blacks were photographed and their images published in *Powergrams*, but their inclusion was typically incidental to the story, such as where the image depicted the company surgeons at work in the operating room and a Black nurse happened to be photographed with them. This was not a staged shot, like so many were, as there is someone on the table and no doubt the doctors did not want to delay the surgery. We are shown that the orderlies and nurses were often Black since these jobs involved cleaning and other menial tasks associated with caring for the sick and injured.

Black cooks and servers worked in the mess halls, preparing food and serving it to both the White and the Black sides of the mess halls. Jobs such as these (cooks, servers, nurses and orderlies, maintenance workers, etc.) seem to infer that these workers were more continually employed in the camps and did not leave for seasonal work on the farm, begging the question of whether they were covered under the insurance policies given by the APC to the employees in September 1920.[383] Death and Disability Insurance (group insurance) was taken out for each employee who worked for six months at APC or the DCC was announced. The

[383] "Employee's Insurance," *Powergrams*, September, 1920, 27.

banner across the top of the page read, “Wages Paid When Totally Disabled and After Death.” Purchased from Travelers Insurance Company at no cost to the employee “in recognition of faithful service and with a desire to increase still further the spirit of cooperation and goodwill between employees and the management” and became effective on August 4, 1920. The insurance did not affect the earnings of the employee and is in effect so long as he remains employed with the company. A document was filled out by the employee naming to whom benefits were to be paid and benefits increased with the length of time served. Disabled employees of the APC or DCC received $500 at six months of employment, and the benefit went to $2500 after ten years of service. Their designated heirs got the money in a lump sum or in installments if they died (without restriction on the manner or place of death), but the insurance was lost if the employee left APC or DCC employment. The announcement states that these benefits come “without regard to age, race, or kind of work done and without medical examination.” Since sex is not listed in the foregoing list, one wonders just where the women stood, but it seems quite forward-looking for the company to offer this benefit. However, it also meant disgruntled employees might think twice before quitting in haste. It is another example of careful framing and presentation of the enticement to stay. The APC nearly always needed men to replace others who left for one reason or another.

5.5 Development of Resorts and Parks for Recreational Use

The potential for recreational facilities for non-resident workers was recognized by the APC long before lake houses and boating became a widespread pastime for Alabamians. Nationally, the management of productive activities as an antidote for the

involuntary idleness of the unemployed masses during the Great Depression was addressed by both Federal and local programs that were developed to fill people's time.[384] At the APC, leisure programs would also help keep employees loyal to the company while helping to amortize the costs of construction long after the construction phases had been completed and the temporary workers had moved on to the next construction project.

Like an idealized and imaginary small town, the APC camps privileged public space over private with large centrally located public areas. It privileged group image over individuality and harmony over differences in its governing rules for construction types. Most company towns were very homogenous along the streetscape. Some employers required the residents to use the same materials and paint colors for their facades. This uniformity was symbolic of the modern industrial order, balanced between comfort for the residents and control for the employer. Control over the workers and the visible expression of efficiency were the two principal goals of company housing in industrial towns,[385] and the APC camps were not exempt from this effort at control. But this also made branding more possible. The APC turned toward promotion of the camp at Lay Lake as a pristine natural resort, complete with a legendary restaurant and all the latest recreational toys.

An announcement in the *Powergrams* May 1920 issue addressed an invitation to those aspiring to receive "inspiring influence of the beautiful in our little world of

[384] Richard Kraus, *Recreation & Leisure in Modern Society* (Boston, MA: Jones and Bartlett Publishers, Kraus, 1998), 212–213.

[385] Wright, Gwendolyn. *Building the Dream: A Social History of Housing in America*. (Cambridge: MIT Press, 1980), Chapter 10 "Welfare Capitalism and the Company Town."

nature…Just one trip to Lock 12 will make you glad to be living and fill your soul with joy."[386] This came from J. U. Benziger,[387] the General Superintendent of Coosa Hydro Plants, who seem to have been open to receiving visitors regularly. By June 1923, the company news magazine *Powergrams* records the experiences of twenty female employees from Birmingham (Figure 5.2), who spent a weekend picnicking and boating on the water after they rode, at special rates, a train to the village at Lay Dam. These "trips to the Mecca of Alabama's electrical industry" had become annual events arranged by APC management (Figure 5.3). The published description of the accommodations and entertainment arranged by Mr. and Mrs. Benziger was also intended to increase membership in "Camp Mitchell," which the company promoted to employees as a way to get more use of the villages.[388] A similar outing was written up in *Powergrams* the following year by "One of the Guests" detailing the reception of "thirty-two merry girls" by the erstwhile Mr. and Mrs. Benzinger and others who came on a barge to pick them up from the L&N station at Okamo, Alabama. Feasting on fried chicken, salads, and a variety of pickles, the guests were entertained from Saturday evening to Monday morning when they departed to return to their jobs in the main office in Birmingham.[389]

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[386] J. U. Benziger, "Around the Circuit, Lock 12," in *Powergrams*, May, 1920, 20.

[387] The name is spelled "Beneiger" elsewhere. The typing was done by a secretary (white-collar worker, probably a junior engineer), and misspellings are not uncommon. Because this name is spelled both ways, depending on the writer, it is confusing. I have used the spelling which was used in the original citation and in the *Powergrams* articles written by Benziger.

[388] "Birmingham Women Employees Visit Lock 12," *Powergrams*, June, 1923, 6–7, and 32.

[389] One of the Guests, "Annual House Party at Lock 12," *Powergrams*, June, 1924, 16, 32.

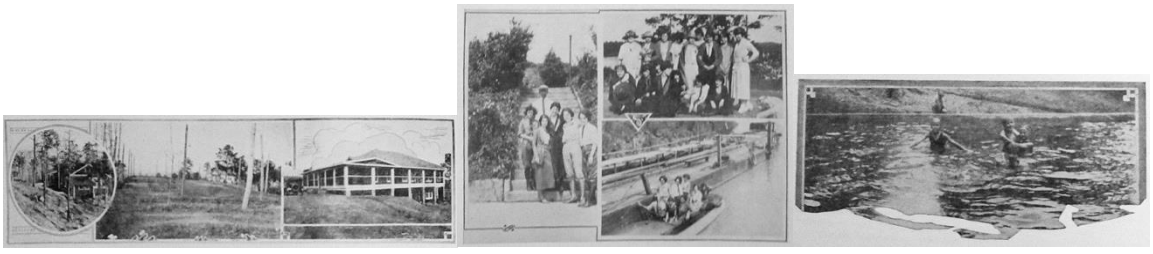
Figure 5.2 Birmingham Employees Visit Lock 12, Powergrams June 1923.

Figure 5.3 Birmingham Employees Visit Lock 12 the weekend of May 17, 1924 Powergrams, June 1924, p 26.

Camp Mitchell seems to have become a generic term that covered employee accommodations at other camps as well. At Mitchell Dam, Jake Benziger (viz.) and his wife welcomed spring with a community center that provided “every luxury and comfort

of the larger cities is provided for those who seek forgetfulness of the hum-drum cares of everyday life." A new runabout (the fastest on Alabama rivers) had been purchased by the club to carry up to sixteen people and sported a permanent top thart could be used as a diving or fishing platform by camp visitors. Three other sturdy little boats were available for the use of smaller parties who might have grown tired of the camp proper.[390] Two lighted tennis courts placed high on the hill and a concrete swimming pool (Figure 5.4) were sure to raise an appetite to be whetted at the clubhouse managed by Chef Collier. The clubhouse also boasted sleeping rooms, wide porches, showers and dressing rooms for the pool, and a living room with a large open fireplace opening to the large dining room accommodating forty diners. This clubhouse was intended for the use of temporary guests and those residing in rebuilt family houses. A call was placed for twenty-five employees to volunteer their time on a weekend to supply the labor needed to refurbish these family homes, the majority of the work having been done by Benziger's forces. All that was needed was to nail the boards back together within a few hours. The confidence that workers would answer this call is evident in the language of the article.[391]

Company officials were confident the need would be met by employees who were dues-paying members of the club. Membership was offered at two levels for $9.60 and $4.80 per year and could be paid by payroll deduction.



[390] "Camp Mitchell Becomes a Recreation Paradise," *Powergrams*, March, 1924, 1–3.

[391] *Powergrams*, March, 1924, 1–3.

Figure 5.4 A residence, tennis courts and clubhouse, March 1924, Birmingham Women visit, June 1923, the swimming pool at Camp Mitchell.

Camp Mitchell was an employee-only club. The old construction office building was re-purposed as a clubhouse that functioned as a hotel and dining hall. Two other houses were redesigned to accommodate ten or twelve guests who wanted to spend a week or a month at the lake.[392] Under this arrangement, Camp Mitchell continued as a community for office workers and their families and permanent operators alike well into the 1950s.[393] On the side of another hill were fourteen small houses to be used for outings by those who apply for their use. Each of these "nice houses" was planned to offer a small kitchen and private shower bath. The APC hoped that employee families who could not previously afford to take a family vacation would be able to stay for a week or so in these houses.[394] The APC managers understood the lake they were creating behind Jordan Dam would not only store potential hydroelectric power but it would afford excellent opportunities for recreation by the citizens of Alabama. Boating, swimming, and fishing were already popular pastimes for Alabamians, and the extra worker houses could be repurposed as cottages for APC employees to rent from the company for weekends at the lake. In February 1924, an article in Powergrams announced that a new "26-foot high-powered motorboat" had been purchased for use on the lake and that the state's largest fish hatchery had been opened in Oxford to stock the APC lakes with fish. Four eight-room houses and a new clubhouse (Figure 5.5), were underway, five five-room houses

[392] F. C. Smith, "The A. P. C. Club", *Powergrams*, April, 1927, 5.

[393] "Camp Mitchell Becomes a Recreation Paradise," *Powergrams*, March, 1924, 1–3.

[394] *Powergrams*, 1923, 13.

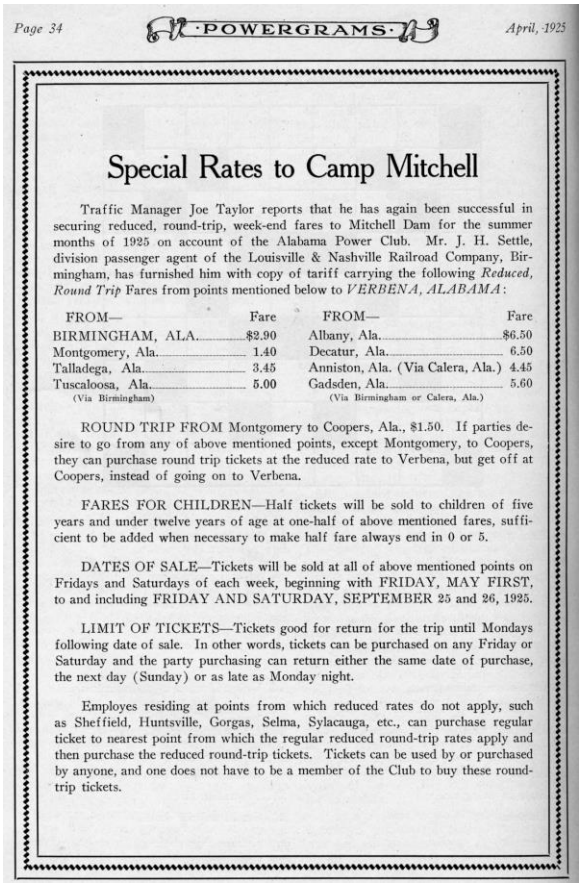
would be renovated, and three five-room houses were already furnished and ready to be rented. These were the houses once "occupied by Messrs. Branch, Myers, and Klein and are as good as any in the camp," reads the article.[395] Some of these houses were equipped with kitchens, but most were expected to take their meals in the club house (Figure 5.6) where they could also read or play cards with other guests. Special rates were offered for travel between Birmingham, Montgomery and a few other cities where the APC had a large office staff so that company employees could take advantage of the new facilities (Figure 5.7). But the writing was on the wall. As early as December 1928, *Powergrams* reported that "numerous summer camps and cottages are expected to spring up" along the banks of the newly created 4,900-acre lake.[396]

[395] "A.P.C. Club Success Assured." *Powergrams*, February, 1924, 14. L. V. Branch was the Resident Engineer at Mitchell and Klein was also in upper management. These two houses are shown in Chapter 3, Figures 3.40, 3.41, and 3.42.

[396] "Jordan Dam to be Turned Over to Operating Department on January First." *Powergrams*, December, 1928, 4.

Figure 5.5 Club House at Camp Mitchell, 3-4-1926.

Figure 5.6 Camp Mitchell Club House interior, 1926.



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Special Rates to Camp Mitchell

Traffic Manager Joe Taylor reports that he has again been successful in securing reduced, round-trip, week-end fares to Mitchell Dam for the summer months of 1925 on account of the Alabama Power Club. Mr. J. H. Settle, division passenger agent of the Louisville & Nashville Railroad Company, Birmingham, has furnished him with copy of tariff carrying the following *Reduced, Round Trip* Fares from points mentioned below to *VERBENA, ALABAMA*:

FROM—	Fare	FROM—	Fare
BIRMINGHAM, ALA.	$2.90	Albany, Ala.	$6.50
Montgomery, Ala.	1.40	Decatur, Ala.	6.50
Talladega, Ala.	3.45	Anniston, Ala. (Via Calera, Ala.)	4.45
Tuscaloosa, Ala. (Via Birmingham)	5.00	Gadsden, Ala. (Via Birmingham or Calera, Ala.)	5.60

ROUND TRIP FROM Montgomery to Coopers, Ala., $1.50. If parties desire to go from any of above mentioned points, except Montgomery, to Coopers, they can purchase round trip tickets at the reduced rate to Verbena, but get off at Coopers, instead of going on to Verbena.

FARES FOR CHILDREN—Half tickets will be sold to children of five years and under twelve years of age at one-half of above mentioned fares, sufficient to be added when necessary to make half fare always end in 0 or 5.

DATES OF SALE—Tickets will be sold at all of above mentioned points on Fridays and Saturdays of each week, beginning with FRIDAY, MAY FIRST, to and including FRIDAY AND SATURDAY, SEPTEMBER 25 and 26, 1925.

LIMIT OF TICKETS—Tickets good for return for the trip until Mondays following date of sale. In other words, tickets can be purchased on any Friday or Saturday and the party purchasing can return either the same date of purchase, the next day (Sunday) or as late as Monday night.

Employes residing at points from which reduced rates do not apply, such as Sheffield, Huntsville, Gorgas, Selma, Sylacauga, etc., can purchase regular ticket to nearest point from which the regular reduced round-trip rates apply and then purchase the reduced round-trip tickets. Tickets can be used by or purchased by anyone, and one does not have to be a member of the Club to buy these round-trip tickets.

Figure 5.7 Powergrams in April 1925 featured advertised special rates for travel between Birmingham and Camp Mitchell.

After a very heavy wind and rainstorm on Sunday, July 8, 1923 blew down approximately fifty trees in the Mitchell Camp, interrupting power generation in the plant for about four hours, work was resumed at the camp. The concrete work on a 30’x 50’ swimming pool was completed, and a bunkhouse was converted into a bathhouse for the use of visitors. Five of the temporary cottages were enlarged with the addition of one room and sewer connections to the camp system completed. Visitors were beginning to come in droves, so the construction and remodeling could not slow. During the month of July, two large “excursions” were entertained, one from “Troy civic clubs” with 250 members and another from the American Legion at Montgomery tat brought 125

members and friends.[397] In October of that year, work on the permanent camp included the completion, and occupation of two houses for permanent operators and brickwork on the original twelve houses was deemed 2/3 complete, while carpentry work was half completed, and the "dangerous portion of the road entering the camp" had been re-routed and resurfaced. A boathouse roofed with corrugated sheet iron, windows, steps, and a platform to the water and to the camp were finished.[398]

People were curious about both the dam and the village, so the APC arranged excursions to satisfy them. The work was ongoing with five temporary cottages being enlarged and sewer lines being installed to connect these houses to the camp system. What a sight! The APC was proud to show off their villages and did not miss opportunities to educate the locals on the benefits of electrical power for business and residential use.

Camp Superintendent C. O. Lineberry shared that on Sat, April 24, 1920, about sixty members of the National Electric Light Association were entertained as guests of the company at a picnic at this plant. The party made the trip from Birmingham to Copeland's Ferry in an automobile and by boat down the river to the plant, arriving about 2:30 pm. Dinner was served in the mess hall building in a regular picnic style and was enjoyed by everyone. After dinner, they were shown through the station and all seemed to be very much impressed with the efficient way in which the plant was being operated. The party returned to Birmingham at about 6:00 pm."[399]

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[397] J. U. Benziger, *DCC Progress Report,* July, 1923.

[398] J. U. Benziger, *DCC Progress Report,* September, 1923.

[399] C. O. Lineberry, "Warrior Steam Plant," *Powergrams,* June, 1920, 7.

The recreational value recognized by the APC was much greater than the Board could ever have dreamed. Today Alabama's lakes and rivers are abuzz with all manner of watercraft. A recent (2014) USGS Topo map of the vicinity of the dam reveals that some of the original roads remain and a few of the houses. The land around the dam was retained by the APC to ensure the safe distances from the dam are respected by the public. Today's houses are built all along the shoreline (but not too close to the dam to be in danger of being caught in the draft of the turbines) by families to enjoy the fishing, swimming, and boating so enjoyed by the denizens of the APC construction camps at the beginning of the twentieth century.

In the topo map view, one can see the remnants of the roads in Mitchell camp, the dam, and the extent of the shoreline maintained by the APC as a buffer between the dam and recreational land sold to individuals. The popularity of Alabama's lakes and streams has never ebbed. Land values are high and prime building lots are difficult to find nowadays. The APC club and Camp Mitchell were phased out as the lake lots were sold and improved with family resorts that offered more in the way of amenities for family use. As more people began to own automobiles, the lake retreats became more accessible and desirable so once again, our car culture changed the pace of life and spelled doom for the APC camps.

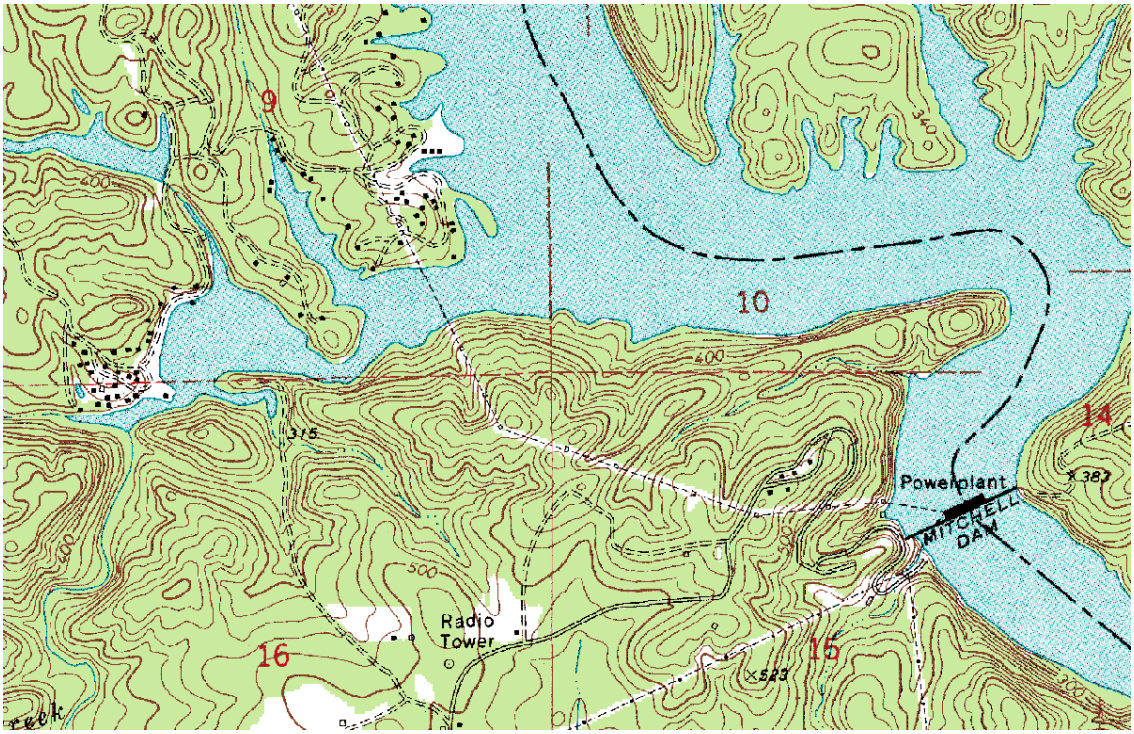

Figure 5.8 USGS Topo of vicinity of Mitchell Dam, 2014.

CHAPTER 6. OTHER COMPANY TOWNS IN ALABAMA: COMPARATIVE ANALYSIS

Alabama is fortunate in that her mineral deposits and flowing streams are plentiful. Alabama became a state in 1819. The availability of large rivers made the state attractive for speculators and investors in light industries such as fabric and spinning mills as soon as planters' cotton was first harvested. The rivers were used for transporting goods upriver to markets and bales of cotton downriver to the mills where those same rivers were harnessed to operate the spinning jennies and looms via the waterwheel, an invention ages old. The technology was transferred from North Georgia and the Carolinas by men seeking to begin their own mills as the country expanded westward. Settlers moved in to farm the Black Belt, a rich swath of Black soil that was quickly depleted by farming cotton using slave labor, a crop that today can only be grown by using fertilizers. Working-class Whites operated the looms and lived in worker housing like the mill villages in the Carolinas and the more industrialized North. By the end of the Civil War, the state was very poor, depleted by cotton farming and the famine that follows the war. This was a general truth regarding the Deep South. The water-powered cotton mills in the eastern side of the state slowly came back to life, but it took some time for the economy to redevelop. The company towns that served the mills were smaller settlements, and the structures are built of durable enough materials to offer a good return on the investment. Most of the mill towns stayed small without other industries large enough to sustain their economic needs when the mills closed.

The mineral deposits around Birmingham were surveyed by prospectors as early as the 1830s, but although the land was known to be rich in iron ore, coal, and limestone, which were found in abundance and could all be bused to manufacture pig iron and later, steel. The area was not accessible by deep water so any manufacturing company would not be able to ship their heavy products easily. A few small furnaces produced iron for cannonballs and plowshares, but there was no large-scale industry until land speculators enticed the railroad companies to run their tracks through the area. The new iron and steel industry grew quickly in the wide valley and low ridges around Birmingham with company towns sprouting up like weeds.

The industrial settlements surrounding the dirty, gritty mines, quarries, and furnaces that were part of iron and steel production had rapidly grown up and knit together the individual company towns, which were all dependent to some extent upon the larger services of the city of Birmingham. These company town types were planned to last for many years until the seemingly endless supply of raw materials ran out, setting them apart from the APC camps. Also, the town of Kaulton, near antebellum Tuscaloosa, was planned for a business with prospects for long term operation. Textile mills that sprang up all around Alabama along its rivers and streams grew rapidly with the advent of electric powered spinning and weaving equipment, supporting other businesses that brought new citizens to small towns.

But Birmingham rapidly became a large industrial center that counted a large proportion of very wealthy men. Some of these men became investors in the APC, and more of them were acquaintances if not close friends with the APC company executives

and directors. For this reason, I have chosen to compare the Birmingham company towns with the APC camps.

6.1 Birmingham Area Mill Village: Early history/background information

Although to our ears the following will sound politically incorrect, it was indicative of the predominant intellectual, moral, and cultural climate of the 1920s, particularly in the American South. This excerpt from Henry McKiven, Jr. in his *Iron and Steel: Class, Race and Community in Birmingham, Alabama, 1875–1920,* discusses Birmingham, Alabama in the context of the impact of class and racial strata in the working-class communities of the steel industry.

> In the years following the Civil War, New South boosters called for the development of southern industries that would capitalize on the region's natural resources while providing a source of employment for its population, enabling the south to redeem itself and once again take its prominent position in the nation.
>
> However, many were concerned about the problems that might come with the presence of an industrial working class. Based upon the experiences in the industrial North, these boosters imagined they could control the working classes by providing means through which white men would experience the prosperity and upward mobility that were essential to harmony in a free-labor society.
>
> Blacks would provide the common labor freeing whites to rise to the levels reserved for them only in New South society. Birmingham was a testing ground for these ideas.[400]

Birmingham has long been cited as a hotbed of oppression for Blacks while offering educated Whites a path to wealth and esteem, particularly in fields like the iron and steel industries. The different work patterns of Black and White workers had begun long before Birmingham was born. Thomas F. Armstrong examined the work of turpentine workers in coastal Georgia and found that the disruptions caused by this work had an impact on the men's families and their work (since the wives and children

[400] Henry M. McKiven, Jr. *Iron and Steel: Class, Race and Community in Birmingham, Alabama, 1875–1920*

(Chapel Hill, NC: University of North Carolina Press, 1995).

sometimes had to fill in for the absent parent) but also opened up exposure to workers from other parts of the southeast and a more commercially oriented economy than they had become accustomed to as freedmen farmers rooted to the soil of their homes.[401] This opening of opportunity also occurred in Birmingham and played itself over again in the camps of the APC when sharecroppers left their fields for temporary work clearing land and laboring for the APC.

In her most important work related to the city of Birmingham, *The Birmingham District, An Industrial History and Guide*, Marjorie White illuminates the story of the Magic City and its surrounding satellite cities and towns. White's exhaustive guide is the bible for Birmingham architectural and historical scholars because it was the most complete visual and descriptive compendium of the early city fabric undertaken at the date of its publication. It remains so today. White's history is another very important source for this dissertation and will be frequently cited in the sections pertaining to Birmingham.

In Birmingham, as workers flocked to the mills and mines, homes and places of business began to rise on nearly any vacant land available. Railroads grew and multiplied to nine major trunk lines by 1893; thanks to the shipping industry in Mobile, Alabama, the coal and iron produced in the Birmingham area could be shipped and sold around the

[401] Thomas F. Armstrong, "Transformation of Work, Turpentine Workers in Coastal Georgia, 1865–1901*," Labor History*, July 2008, https://www.tandfonline.com/doi/abs/10.1080/00236568408584774, 521–532. Even for local workers, turpentine work included rafting or rail operations that could take several days, requiring extended absences from home. For men, this meant separation from families and exposure to workers from other parts of the southeast and a more commercially oriented economy. Women remained at home working in farming and managing the family interests, but this brought a disjuncture in men's and women's work patterns indicating a transition in the work process well before Blacks began migrating to cities and industrial jobs.

world.[402] In 1904, the Commercial Club boasted that the era of town building and skyscrapers had begun. That year 1,500 houses were built in mining and mill areas to provide housing for the workmen; nearly all were built by the companies for their employees. Almost 2,000 more were built inside the city of Birmingham.[403] It is no wonder Birmingham was called "the Magic City" because the population grew from a little more than 3000 in 1880 to 132, 685 in 1910 through both growth and annexation.[404]

In the following pages, a few of the Birmingham company towns and satellite settlements will be discussed to provide a comparison with the APC camps. Other company-owned towns were common in the Birmingham area and in the other parts of the state where there was a mine, mill, or manufacturing industry to support them.

Nearest Ensley were Pratt City, Thomas, and East Thomas. Corey, Bayview, and Overton were located in other areas around the outskirts of Birmingham while Kaulton is located in Tuscaloosa some sixty miles west of Birmingham.

The wealthy and educated men who operated these industries had come for the opportunities afforded by the one location in the world, as every Alabama schoolchild learns, that offered all three needed materials for iron and steel making. Birmingham had these in abundance. Iron ore, limestone, and coal made the city a mecca for investors and speculators alike.

The owners, members of boards of directors, and upper-level management men of these large commercial ventures were the cream of the Birmingham elite. Their income

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[402] Marjorie Longnecker White, *The Birmingham District, An Industrial History and Guide (*Birmingham, AL: Birmingham Historical Society, 1981), 49–51.

[403] White, 62.

[404] Michael W. Fazio, *Landscape of Transformations, Architecture and Birmingham, Alabama* (Knoxville, The University of Tennessee, 2010), 74.

and social status allowed their families to live in the most exclusive neighborhoods along the ridge of Red Mountain where their imposing homes enjoyed a panoramic view overlooking the city of Birmingham. Most executives had offices (at least APC and TCI-U. S. Steel executives did) in the Brown Marx Building in downtown Birmingham.

Many also belonged to the Birmingham Chamber of Commerce, Independent Presbyterian Church, and the Birmingham Country Club, which boasted an eighteen-hole golf course sprawled over a newly platted garden suburb "over the mountain."[405] No doubt, there were conversations relating the relative merits of housing workers on-site at the mining facilities, coking ovens, and blast furnaces that APC executives, who were also members of these elite groups, would have found interesting and informative.

[405] Leah Rawls Atkins, email correspondence, Sunday, May 5, 2013. Atkins believes there must have been discussions about the progress and successes/failures of new company towns between the APC executives and executives at other large corporations in Birmingham

Figure 6.1 Ensley, Alabama in 1937. Arthur Rothstein, photographer.

6.1.1 Ensley

Inspired by the rapid growth of Birmingham, Enoch Ensley, a wealthy industrialist from Memphis, Tennessee, began planning a rival industrial center at a new site named Ensley in 1886 (Figure 6.1, and 6.2, pink). Later, the Tennessee Coal and Iron Company (TCI) bought him out but kept Ensley as president. Ensley had sanitary engineer George Edwin Waring, Jr. layout the sewage system and a gridded town plan on flat land near the Pratt mines west of Birmingham. Without any hierarchy to speak of, the plan's main focus was the four huge furnaces arranged side by side at the juncture of the grid and the Kansas City, Birmingham, and Memphis Railroad. Houses were wood frame vernacular cottages, usually with gabled roofs. The only other imposing sights were the hotel, which seems to have been created mostly for show, and the Ensley Land Company office with its overly large front porch.[406] Ensley had constructed the four blast furnaces reputed to be the largest pig-iron facility in the world, but he did not spend more than five years in Birmingham, and his town did not reach full population until more than a decade after his death.[407]

6.1.2 Pratt City

The largest operator in the Warrior Coal Fields was the Pratt Coal and Coke Company, organized in 1878 with a capital stock of $200,000 (Figure 6.2 purple). The mines opened in 1879, and Coketown (as Pratt City was called until New Year's Day,

[406] Fazio, 66.

[407] Fazio, 66.

1891 when it was officially named in honor of the Alabama industrialist Daniel Pratt) grew and grew. Birmingham investors Henry DeBardeleben, James Withers Sloss, and Truman Aldrich acquired mineral lands on the southeastern outcrop of the field nearest Birmingham; these lands were later acquired by TCI. With 800 to 1000 free laborers and convicts living at its mining camps, the Pratt mines were the most extensively worked in the district, producing first-class coking coal for pig-iron furnaces in Birmingham. State convicts were employed at Pratt well into the 1900s. Ninety percent of these were Black and were required to work ten-hour days and fill a quota. Convicts could not strike so they ensured the company a steady but cheap workforce. The company paid the state and county governments a certain monthly amount for the use of the convicts, but the men were not paid. The convicts were housed in stockaded areas next to the mines.[408] In 1883, a new state law required the convict system to provide a resident physician to care for the convicts as well as a hospital and updated housing. Dr. Russell M. Cunningham arrived in 1883. Under his care, the mortality rate was sharply reduced within two years. Cunningham made recommendations for a convict village that approximated the conditions under which the free miners lived. The prison facilities were upgraded and enlarged in1888 to include a commissary, bathhouse, kitchens and dining rooms (separate for prisoners and guards), and a laundry. Cunningham remained on the job until 1914, concurrently launching a successful political career (State Senator 1896–1900, Lieutenant Governor, 1901–1904, Governor during 1904–1905, and then again Lt. Governor until 1907. He considered his work for prison reform, particularly in the convict lease system,

[408] White, 246, 248.

regulation of mine sanitation, and mine inspection to be his most important political work.[409] This more humane treatment of prison labor was very unusual in the South.[410]

Pratt City was known for its saloons and distilleries until Prohibition came to Alabama. A brick manufacturer, lumber company, bottle works, and the Pratt City Bank in addition to groceries, dry-goods stores, confectioneries, and furniture stores were popular with the people who were able to ride the Ensley Railroad to shop there.[411] (The streetcar undoubtedly made the short hop up to Pratt City for a bottle or two, an attractive option for the citizens of Ensley.)

[409] White, 247.

[410] Blackmon, Douglas A. *Slavery by Another Name: The Re-Enslavement of Black Americans from the Civil War to World War II (*New York: Doubleday, 2008), and conversation with the author during a presentation about the Chattahootchee Brick Company for Twin Cities Public Television at Southern Polytechnic State University, filmed April 8, 2011 and broadcast February 12, 2012. Blackmon published accounts of the horrors of leased convict labor and won a Pulitzer Prize for his documentary, *Slavery by Another Name*.

[411] White, 248–249.

Figure 6.2 Ensley, Pratt City, and Thomas in 1914. Modified by Author.

Workers lived in frame houses with various ethnic groups forming concentrated enclaves or ghettos where they retained parts of their social and religious traditions. By 1910, Pratt City had a population of 7,000 (40 percent Black, 20 percent European immigrants, and 40 percent Southern Whites.) The Black workers lived along the railroad in an area known as the "Drifttracks."[412] They had separate churches, cemeteries, and schools. There was also a French area between Village Creek and the railroad tracks known as Fayette Quarters or Frenchtown.

The streetcar line, which connected Pratt City with Thomas and Ensley, was the major artery in this small town of 4,000 people by 1890. Where the streetcar line crossed the grid laid out by the developers, triangular blocks were formed that were also quickly populated by neighborhood businesses.[413] This core expanded as the Pratt Coal and Coke Company developed their operations and local miners rode the streetcar into Pratt City to shop. Although the town of Pratt City was ethnically mixed, the architecture is typical of small-town Southern turn-of-the-century types; one or two-story brick and frame shops and small businesses operated in Pratt City during the second decade of the century. The small house lots promoted a friendly atmosphere where life ran its mostly smooth course.[414]

6.1.3 Thomas and East Thomas

[412] White, 248–250.

[413] White, 249.

[414] White, 250, 251.

The company town of Thomas, close to Pratt City (Figure 6.2, peach), was laid out on a grid during the late 1880s after Samuel Thomas, president of Thomas Iron Company in Pennsylvania, successfully negotiated with Henry Fairchild DeBardeleben to buy a large tract of land to the northwest of Birmingham. The area had been only modestly productive for its previous tenant, but under Thomas and his brother Edwin, it became the site of technological innovations that greatly improved output from their Pioneer Mining and Manufacturing Company.[415] The grid was more practical in this fairly flat broad valley, where its wide, tree-lined streets were closely modeled after Hokendauqua, the headquarters of the Thomas Iron Company in the coalfields of eastern Pennsylvania. The worker housing was densely arranged shotgun houses. An engineer from the parent company, Frank B. Keiser, relocated to Alabama to supervise the construction. He remained general superintendent in charge of the works and the town at Thomas until 1909 and also served as plant manager, mayor, and school superintendent. As was common during those times, housing reinforced a clearly delineated class structure. The superintendent's substantial two-story residence at Thomas was surrounded by a White picket fence and sat in the center of a large lot containing apple orchards, a park, and tennis courts. Administrators and foremen lived in five-room brick houses along First and Second Avenues where the Presbyterian Church stood. The frame commissary on Second Avenue was known for its fresh produce and fine meats.

Company-provided housing for semiskilled and day laborers was built as the furnaces expanded after the turn of the century. Black families lived in frame, four-room square-tops and two-room shotguns from Fourth to Eighth Avenues. The industrial

[415] Fazio, 58.

facilities and the tracks of the Birmingham Southern, Frisco, and L & N railroads and the Jasper Road surrounded the community, giving it well-defined boundaries.[416] The arrangement of the houses was hierarchical with the Whites having the more desirable sites. The relative openness of other villages gave the owners the option of spreading housing out, but here at Thomas, the boundaries were firmly fixed.

Five hundred and fifty workers and their families lived at Thomas. They worked at the three furnaces, the coke ovens, and a quarry. Thomas housing was cited by *The Survey*, a leading journal of social work profession and social reform between 1879 and 1952 that reported on industrial housing, as being painted and in good repair with most of the houses fenced and surrounded with gardens in marked contrast to other company towns. An open spring was thought to provide good water.[417]

The original church was of frame construction, but in 1925 a stone church was begun (Figure 6.3). It was built by the Pioneer Company with stones from obsolete beehive ovens; it was the first Italian church built in the South outside New Orleans. Additional buildings on the site included a gazebo, bandstand, and restrooms, with inscriptions in Italian.[418] The church displayed iron ore-stained red limestone with appointments of White limestone, randomly distributed White limestone blocks, and a clay tile roof as proof of its origination in the coal and iron ore fields where the men labored. The gazebo was constructed of the same materials.

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[416] White 131–132. The maps and photos in White's book are particularly instructive.

[417] HABS HAER, https://www.loc.gov/pictures/item/al1004/. The HABS website mentions *The Survey*, and more can be learned here: https://socialwelfare.library.vcu.edu/organizations/the-survey/

[418] White 132–133.

The Thomas holdings in Pioneer were purchased in 1899 by Republic Iron and Steel Company of Cleveland, Ohio without the Thomas brothers ever spending much time in Birmingham.[419]

Figure 6.3 St. Mark's Church and the Gazebo at 1040 10th Avenue West, Thomas, HABS HAER.

6.1.4 Corey (later called Fairfield)

Once the second-largest coal producer in the United States, Tennessee Coal, Iron and Railroad Company was bought out by United States Steel in 1907, and TCI became a subsidiary of U. S. Steel operating in Alabama.[420] In 1909, Robert Jemison Jr. and a

[419] Fazio, 60.

[420] Kevin Hillstrom and Laurie Collier Hillstrom, *The Industrial Revolution in America: Iron and Steel, Railroads, Steam Shipping (*Santa Barbara, CA: ABC-CLIO, 2006), 71.

group of socially prominent businessmen organized the Corey Land Company (named for William Ellis Corey, second president of U. S. Steel Corporation) to develop a model industrial town. The name was changed to Fairfield in 1913 when President Corey was involved in a divorce scandal, and officers of the corporation did not wish to use his name "as a place where U. S. Steel was expected to invest millions."[421] Robert Jemison was a developer of high-end residential properties to the southeast of Birmingham both along the crest of Red Mountain and in the valley beyond and commercial buildings and apartments in town and to the west of town; he built working-class neighborhoods. His two largest projects included several hundred acres of land.

Corey was one of these, a sloping site (two hundred and forty acres of cotton fields and wooded land) near the new mills. In an unusual move, houses were sited in relation to the topography instead of on a grid that ignored the terrain, and streets wound through landscaped and wooded low hills, resulting in a more rural or at least suburban image (Figure 6.4). Civic structures were grouped around a central plaza. (Figure 6.5). Also unusual were the parks, landscaping, and streets, which were carefully planned to enhance the community because it was designed to contain the homes of the managers and executives of the company. These homes appear very similar in style and size to those furnished by the APC for their permanent employee housing in the camps. Lower echelons were housed in orderly gridded neighborhoods closer to the mills and production areas of the U. S. Steel plant.

[421] White 116–118.

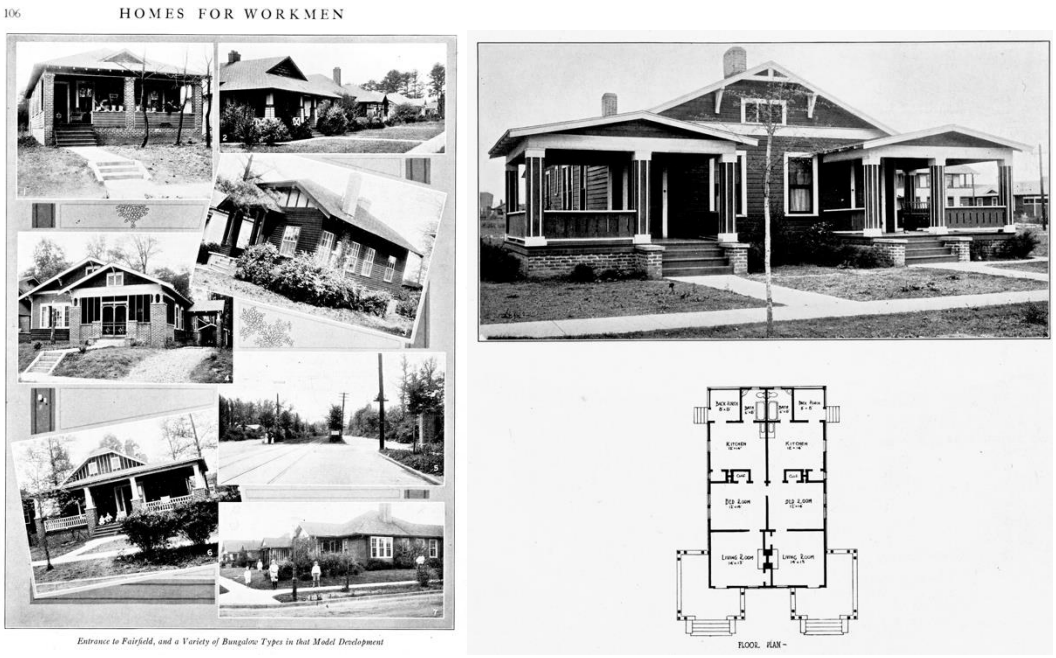

Figure 6.4 Typical Bungalow homes and the most popular style Bungalow, Homes for Workmen.

Figure 6.5 Corey Plan 1911, Jemison Land and Insurance Company, Birmingham Public Library Archives

Jemison was an astute developer. He studied the plans of Pullman and Gary, Indiana and Vandergrift, Pennsylvania, which had been laid out by the Olmsteds in 1895.[422] He appreciated the curving tree-lined streets and back alleys that divided blocks enabling the less attractive activities of residential life such as trash collection to take place out of sight. Jemison hired prominent Boston landscape architect George. H. Miller and perhaps also landscape architect William Kessler[423] to design a scheme for Corey.

Local architectural firms Miller and Martin and Warren and Welton were hired to assist in the design. Warren and Welton provided designs for central municipal and business buildings and some houses for which "a minimum cost of $1,250 each was intended to ensure a high standard of quality and design.[424] According to Michael Fazio, "Miller's scheme for Corey ranks in design sophistication above any of the planned towns that Jemison had looked to for instruction."[425] It appears in most books on city planning published since its beginning so its prominence among the best town planning schemes is widely acknowledged.

By about 1914, one hundred and sixty houses had been built and were rented or sold to employees with safeguards in case the employee left TCI. These homes cost $2,500 to $3,000 to build. This was a moderately expensive construction for the era (Figure 6.6). The model community was planned to house skilled workers and

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[422] Fazio, 87.

[423] William Kessler also designed landscaping for the APC houses at the construction sites. A drawing numbered F-5575 shows two cottages, "Type A" and "Type B" with "typical planting arrangements" at unnamed locations. The drawing was found among the Gorgas Steam Plant papers, but that does not mean it was used only in that location. Many of the APC construction drawings were generic and intended for use in many sites, not just one.

[424] White 116–118.

[425] Fazio, 88.

superintendents in several new and diversified plants proposed by TCI and U. S. Steel subsidiaries, among them was a wire manufacturing plant. Although the community did not grow as quickly as had been expected because the wire manufacturing facility had not yet been completed, it was an experiment intended to provide "better hygiene, better sanitation, better home life, better public life, better morals, and better conditions of all kinds surrounding the working man."[426] Some people were able to take the streetcars to work, but the plans did not call for housing facilities for low-income immigrants and Blacks. Instead, TCI built Westfield, a model village for Black employees.[427] Westfield was located west of Fairfield across the railroad tracks and was the home of Willie Mays and former Federal Judge U. W. Clemon, as well as other successful inhabitants.[428] However, none of this is in existence today because many of the old houses of the community were razed during the construction of Interstates 20 and 459 during the 1970s and 1980s.

At the center of Corey, the civic center was composed of five buildings surrounded by commercial buildings in the northwest and parks to the southeast (Figure 6.7), and these were surrounded by residential blocks on all sides. An orderly grid to the north of the center was balanced by Olmsted-inspired winding roads following the higher topography with two embedded parks in the southeast. A salute to Gary, Indiana and Judge Gary, the first president of U. S. Steel, still stands in the main boulevard, a

[426] White 94.

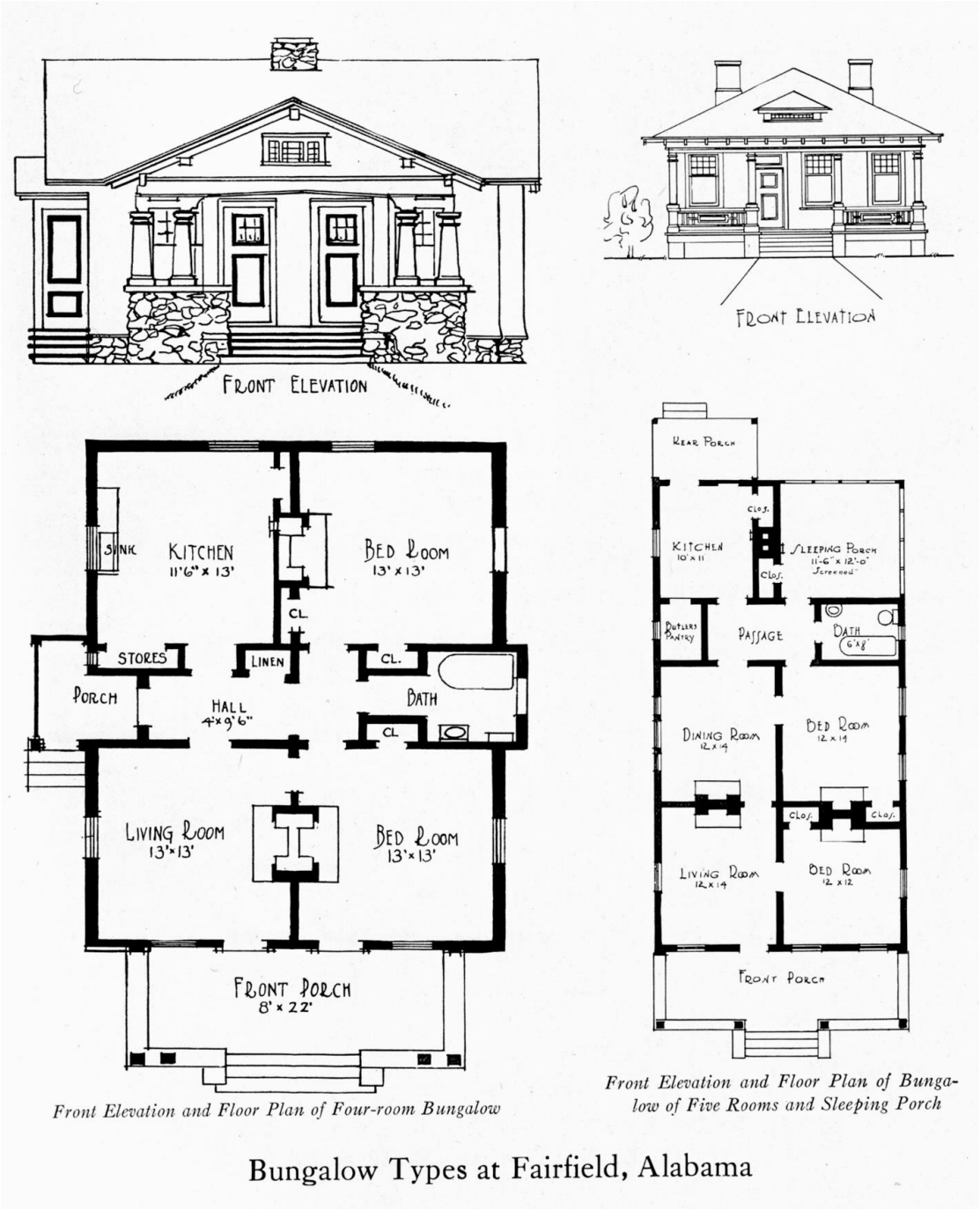
[427] White 122.

[428] Chambers, Jesse, "New film remembers long-gone West Jefferson community of Westfield, home of Mays Clemon," Alabama Media Group, in online news at AL.com posted Aug 2, 2013, http://blog.al.com/spotnews/2013/08/new_documentary_film_remembers.html. Last viewed on April 7, 2017 at 5:42pm.

commercial street that connects the center of town with the railroad.[429] Miller and Martin designed the library, town hall, school, and YMCA for the termination of the axis that runs through the main park spaces to the civic center with a bank, hotel, and commercial buildings closer to the intersection of Gary Avenue and Center Street.[430]

[429] Fazio, 88.

[430] Fazio, 86.



Front Elevation and Floor Plan of Four-room Bungalow

Front Elevation and Floor Plan of Bungalow of Five Rooms and Sleeping Porch

Bungalow Types at Fairfield, Alabama

Figure 6.6 Bungalow Types at Fairfield, Homes for Workmen.

Figure 6.7 Portion of Civic Center and Plaza, Fairfield, 1911. Birmingham Public Library Archives.

Michael Fazio questions Jemison's intentions for creating a town on the scale of Corey without an ulterior motive, not even the production of "better labor, more contented labor" for increased productivity.[431] Perhaps it was simply an attempt to make big profits from the sale of lots to TCI and other developers, who would then sell to the workers. After all, Jemison was in the development business and quite successful.

As it happened, an anthill of men and mules began work in April 1910; in a mere thirteen months, twenty-eight thousand trees had been planted and sewers, sidewalks, and

[431] Fazio, 88.

utilities (water, gas, and electricity) installed.[432] This example of professional planning led to better residential design in other areas of the district, especially at the other TCI mining camps. In 1918, "with increased wartime demand for coal, iron, and steel, TCI built nearly one thousand new houses, apartments, and bunkhouses for single male workers."[433] In 1913, the company reorganized its health department, establishing medical, dental, and sanitary clinics in all outlying areas to reinforce the main hospital at Fairfield. TCI built substantial residences for teachers and paid their salaries at the twenty-two schools (eight Black and fourteen White) the company built for the families of the workers.

TCI hired Dr. Lloyd Noland as the first superintendent of a department of health and as the company surgeon. By 1919, TCI completed the 318-bed employees' hospital at Fairfield (Figure 6.8); spurred on by the motivation of anti-union policy and the usual paternalism, the company far exceeded the norm for attention to health and social concerns.[434] The hospital was renamed for Dr. Noland in 1950. There were four floors arranged as wings connected by a central hub. The roofs of the wings were used as sun porches much like those Dr. Benedict had built at his hospitals at the Mitchell and Jordan camps. The hospital was demolished in 2009 after changing hands several times.[435]

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[432] White 116–117.

[433] White 83.

[434] Marlene Hunt Rikard, "'Take Everything You Are … And Give It Away': Pioneer Industrial Workers at TCI," *The Journal of the Birmingham Historical Society, 7*, No. 2. (November 1981), and Marlene Hunt Rikard, "An Experiment in Welfare Capitalism: The Health Care Services of the Tennessee Coal, Iron and Railroad Company" (Ph.D. Diss., University of Alabama, 1983. Also see White, 94, 95.

[435] www.bhamwiki.com/Lloyd_Noland_Hospital. This information was known to me since I grew up in Birmingham and the hospital had a reputation for excellence. I checked the facts on the Birmingham wiki on August 6, 2019.

Figure 6.8 Lloyd Noland Hospital for TCI at Fairfield. Birmingham Public Library Archives.

With its deeper pockets and higher-quality coal, TCI was able to operate more efficiently and therefore more profitably, realizing the goals of the owners of the company towns for retention of labor. The same motivations were seen at other company towns, notably at TCI's Bayview in central Jefferson County where the city was laid out in a double-radial plan next to Bayview Lake.[436]

[436] White 83.

6.1.5 Bayview

A TCI "model village" that featured "houses of various sizes and plans . . . all pleasingly set on the natural terrain with considerable attention to community plan," the Bayview camp was highly praised for its amenities such as sidewalks beside paved streets, playgrounds for the children, schools and churches, electricity, and clean water (Figure 6.9). Michael Fazio found it to be more successful on paper than as experienced in person. He states the problem is size, complaining the houses are small and the roads are narrow.[437] By the standards of today, many worker villages seem cramped. However, the workers of the 1920s did not commute to work in automobiles; they walked to work, and they did not need large houses for entertainment because they worked long hours in cramped dark spaces. A small house might have seemed very grand to a miner.

[437] Fazio, 135, 136.

Figure 6.9 Bayview, looking east in 1993 HABS-HAER.

Several Alabama communities were highlighted in *Homes for Workmen*, a 1910 publication of the Southern Pine Association, along with others from around the country. Bayview was given a good write-up since it was constructed entirely of southern pine harvested locally in Alabama. Typical cottages in Bayview are shown in the accompanying photographs to be simple bungalow-style three- and four-room cottages with gabled or hipped roofs and lapped siding painted all White or dark with White trim (Figure 6.10). Heating was by centrally located fireplaces; chimneys served multiple hearths in either the center of the house (three hearths) or placed on each side of a common wall. Yards were grassed and neatly cut, with trees for shade permitted only at a safe distance from the houses. Houses are supported on piers and for better ventilation in summer have large louvered vents in the gable ends, generous porches, and are fitted with large double-hung windows that are sometimes doubled in the living room spaces. Bayview had paved streets and alleys, concrete sidewalks, water, electric lights, and a sanitary system. "Skilled social science workers" instructed miners and their children in outdoor sports as a "healthy community life" was promoted by the company.[438]

Fazio is correct in that Bayview was a product of convenience more than picturesque sensibilities. Its "two ovals of concentric streets"[439] that conform to the terrain and the bends of the lake would seem to offer fine views and a sense of pleasant

[438] "Bayview, Alabama" *Homes for Workmen, a Presentation of Leading Examples of Industrial Community Development*. (New Orleans: The Southern Pine Association, 1910), 25.

[439] Fazio, 136.

spaciousness. But TCI practiced “welfare capitalism” to build and maintain a reliable, nearly captive labor force. Bayview Lake was created by the damming of Village Creek and might have been an attempt to contain workers who could not walk off the job without having to go through the town of Mulga or the Mulga Mines Camp. The community of Kaulton, situated about sixty miles west and south of Birmingham, and now a part of the City of Tuscaloosa, Alabama, was perhaps less overt in its control tactics.

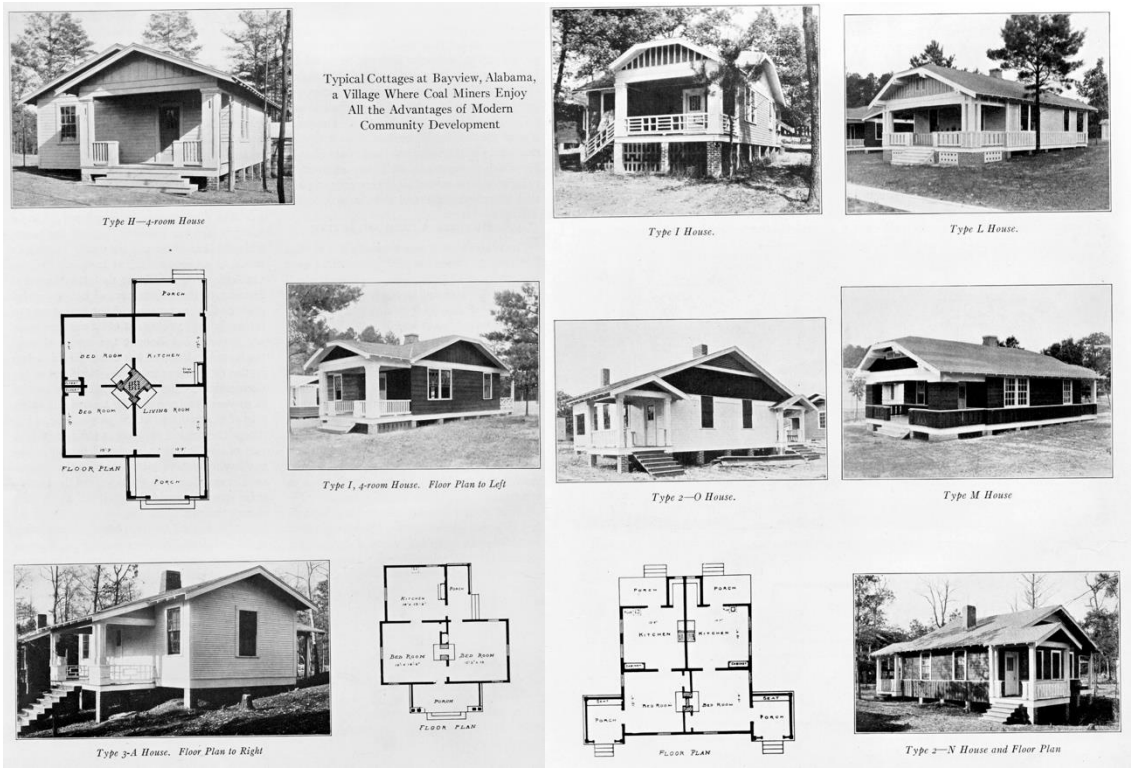


Figure 6.10 Bayview Worker Housing, Homes for Workmen.

6.1.6 Kaulton

Attracting the best class of labor and preserving their “producing power” was the subject of George H. Miller’s talk presented at the Southern Pine Association’s meeting in 1910. It echoes the sentiments of many Southern managers and stockholders of the era,

viz. owners wanted the kind of labor that appreciated "desirable conditions" and to let the poor laborer go "to employers who may have less faith in their workmen."[440] By providing "desirable conditions" (i.e., adequate housing, a safe and secure working environment), the right kinds of workers are attracted, maintained, and their efficiency is increased because these conditions contribute to the strength, skill, and will in the workman that will enable him to, in turn, give more to the employer and the workplace. In his rather pompous manner, Miller wrote, "Every feature in such a town is designed to have some constructive influence for specifically benefitting the workman for his work, and he gets nothing he does not pay for, thus eliminating the element of paternalism."[441] Miller believed the physical town features could permit and even invite the worker to "maintain and upbuild efficiency in industrial production."[442]

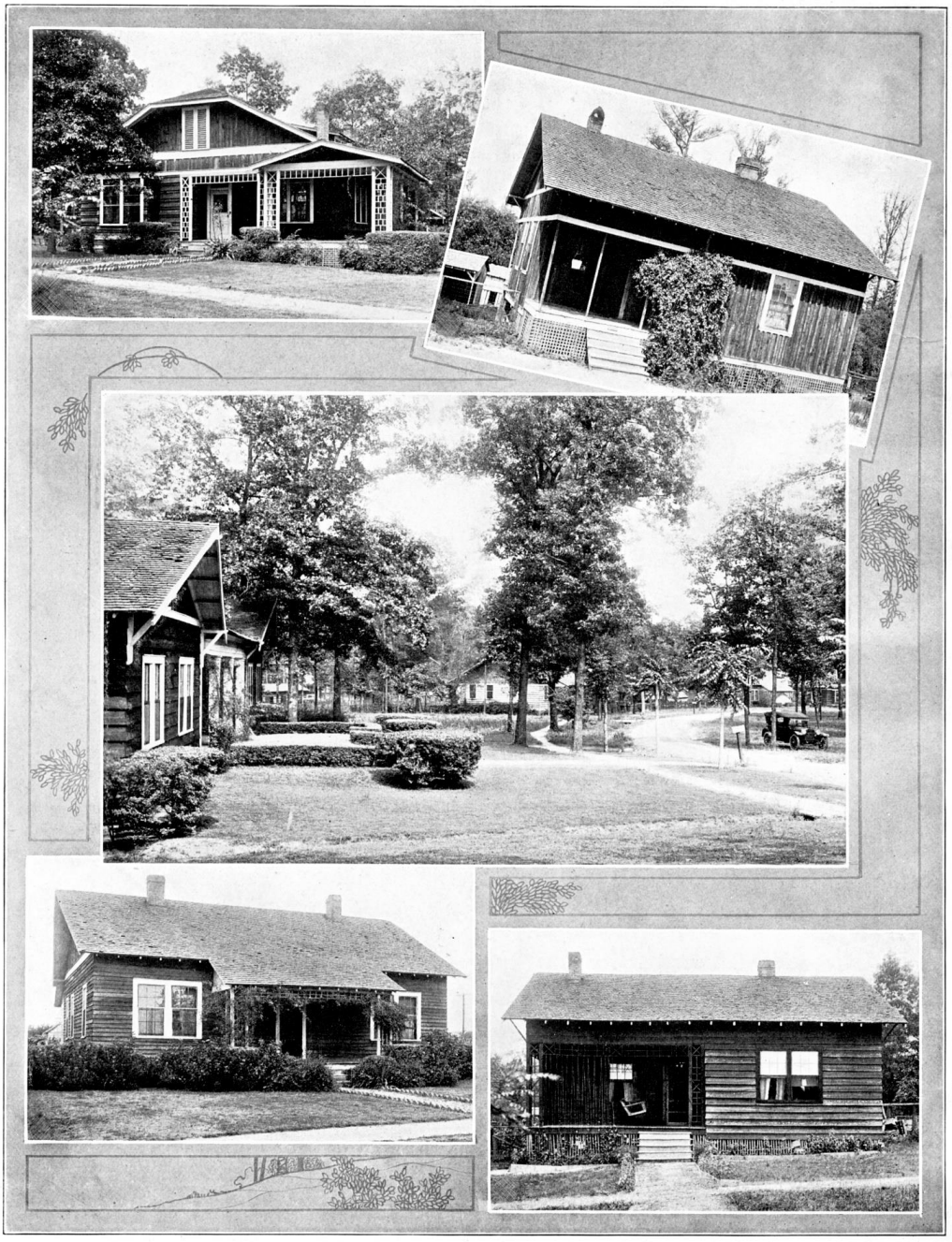
Kaulton, a suburb to the south of Tuscaloosa, has now become a neighborhood in that city with only a few of the original homes preserved. Again, these homes appear to be like the APC permanent worker housing in the APC camps. The plan of the town provided for expansion to handle the increase of employees in the case of the lumber mills or employees of subsidiary companies such as by-product companies (Figures 6.11 and 6.12). The owners apparently had no doubt that shipping facilities would grow and bring new opportunities to the area. Provisions were made for the expansion of the town as needed, based on the desire to grow and the rising price of land in the area that the

[440] George H. Miller, "Kaulton, Alabama: a Southern Pine Manufacturing Town Built Along Model Lines". Published in *Homes For Workmen; a Presentation of Leading Examples of Industrial Community Development* (New Orleans: The Southern Pines Association, 1919), 9. Miller was an "Industrial Town Planner" in Boston, MA, according to his byline.

[441] Miller, 10.

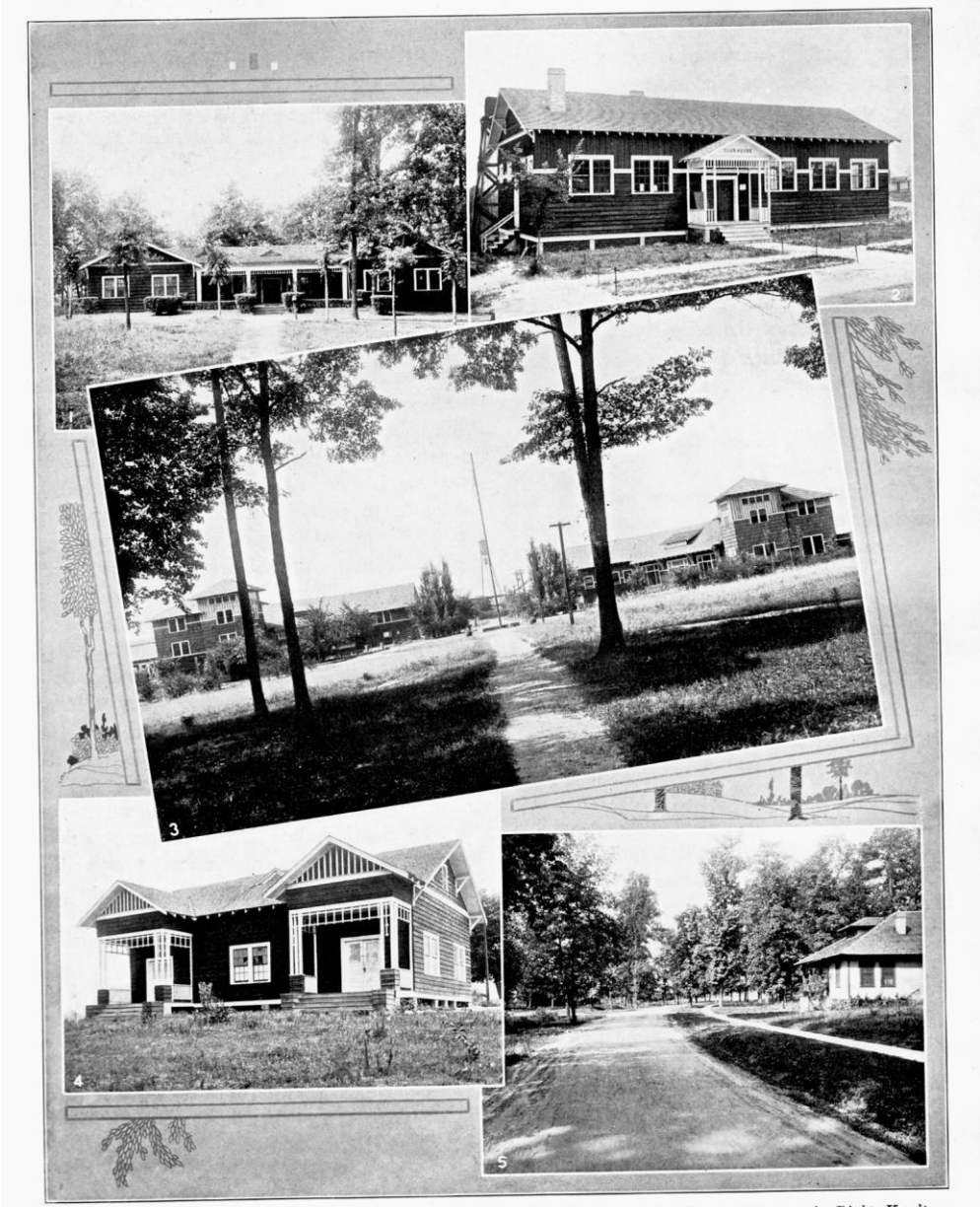
[442] Miller, 11.

Kaul Company was consciously driving the moment the plans were laid to purchase the land.[443]



[443] Miller, 11, 13.

Figure 6.11 Street scene in Kaulton, Homes for Workmen.



Civic Center, Kaulton, Ala., with the General Store on the Left and Y. M. C. A. and Office Building on the Right, Kaulton Inn is Shown at the Upper Left Corner of Page, Other Buildings are the Negro Y. M. C. A. and One of Kaulton's Schools

Figure 6.12 Kaulton Civic Center and typical houses Homes for Workmen.

Located "as near the extensive lumber plant as seemed advantageous for fire protection,"[444] the axis along the main street of the town was perpendicular to the long lines of the mills themselves. The entrance to the mill was a continuation of the 80-foot-wide main street of the town; looking toward the mill, the view was interrupted only by an arbor with seats that framed a view of the 125-foot water tower. Along this axis, the civic center and athletic fields also lay. Branching off from it was the road that led to the Black workers quarters. The commissary, clubhouse, bath, and other office buildings were situated along the approach to the mill with a church, a school, and a hotel forming the civic group. An open area was reserved for a possible park and playground areas.

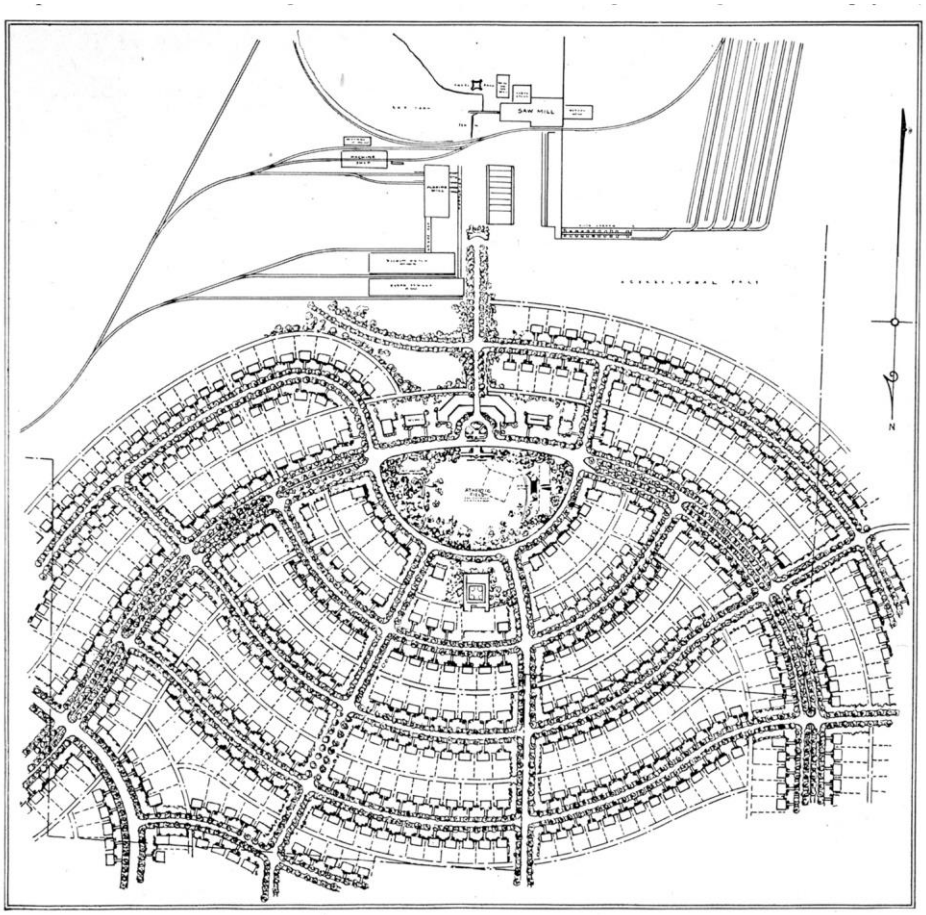
Kaulton was situated on an open, relatively flat plain where there was ample room to expand the town in any direction (Figure 6.13). This made it simpler to organize on a grid, placing the workplace as near the town as was deemed safe.[445]

The centrally located open area was divided into three parts: the athletic field with an area slated to be enhanced with planting of trees and shrubs to "form irregular edges of soft foliage", another area with curving paths and ornamental plants to be used for adults, and a children's area near the schoolhouse in which a shelter was placed "so that mothers may sit in the shade and watch over them while the children play" in a winding pool or upon playground apparatus. This area was also planted with ornamental shrubs along winding park paths.[446]

[444] Miller, 13.

[445] Miller, 13.

[446] Miller, 13.



Plot Plan, Kaulton, Ala.

Figure 6.13 Plan of Kaulton Homes for Workmen.

The Kaul Company was actually expecting that the wide streets of their town would eventually become boulevards of the city of Tuscaloosa that would connect the city center to the railroad station. The streets and sidewalks were planned to be wide enough to carry the kind of traffic intended and no more. A landscape plan had been worked out for all streets, fronts of cottages to provide "revitalizing shade," and "sheets of flower bloom" to direct traffic and hold the soil. Cottages were a "California bungalow type" with roofs sloping toward the street and building lines, lot depths, widths, and height of floors were fixed to ensure the proper building types were added and unsuitable

types discouraged. Vine trellises protected the interiors of rooms from the view of passers-by. Window boxes were meant to prevent the use of hanging baskets made from tin cans. Naturally, the construction was wood (Kaul's business was lumber mills), and this was stained in subdued tones to differentiate the houses from one another while giving conformity to the town scheme. Cottages were evenly spaced along the curving streets even though the prime consideration was economic construction and utilitarian use. Because the town was planned to be convenient, safe, and sanitary, it had a pleasing appearance and was easy to keep up.[447]

Although the town was planned for the most advanced state, some features were intended to be carried out only as conditions demanded them and employees cooperated.[448] For instance, streets fit into the topography so they were easier to grade, giving pleasant fan shapes and the number of lots was actually greater than a gridded plan would have provided. The California bungalow style of cottage was seen to be roomier and more attractive than other styles, and the cost to build was lower. Even the hotel was built along California Spanish lines, with both a wide front terrace and pergola and an interior patio.[449] An image of a two-room home "for Negro Labor" shows a neat and attractively landscaped cottage like the White cottages except in for landscaping (Figure 6.14, lower image).

[447] Miller, 8–16.

[448] Miller, 15.

[449] Miller, 8–16.

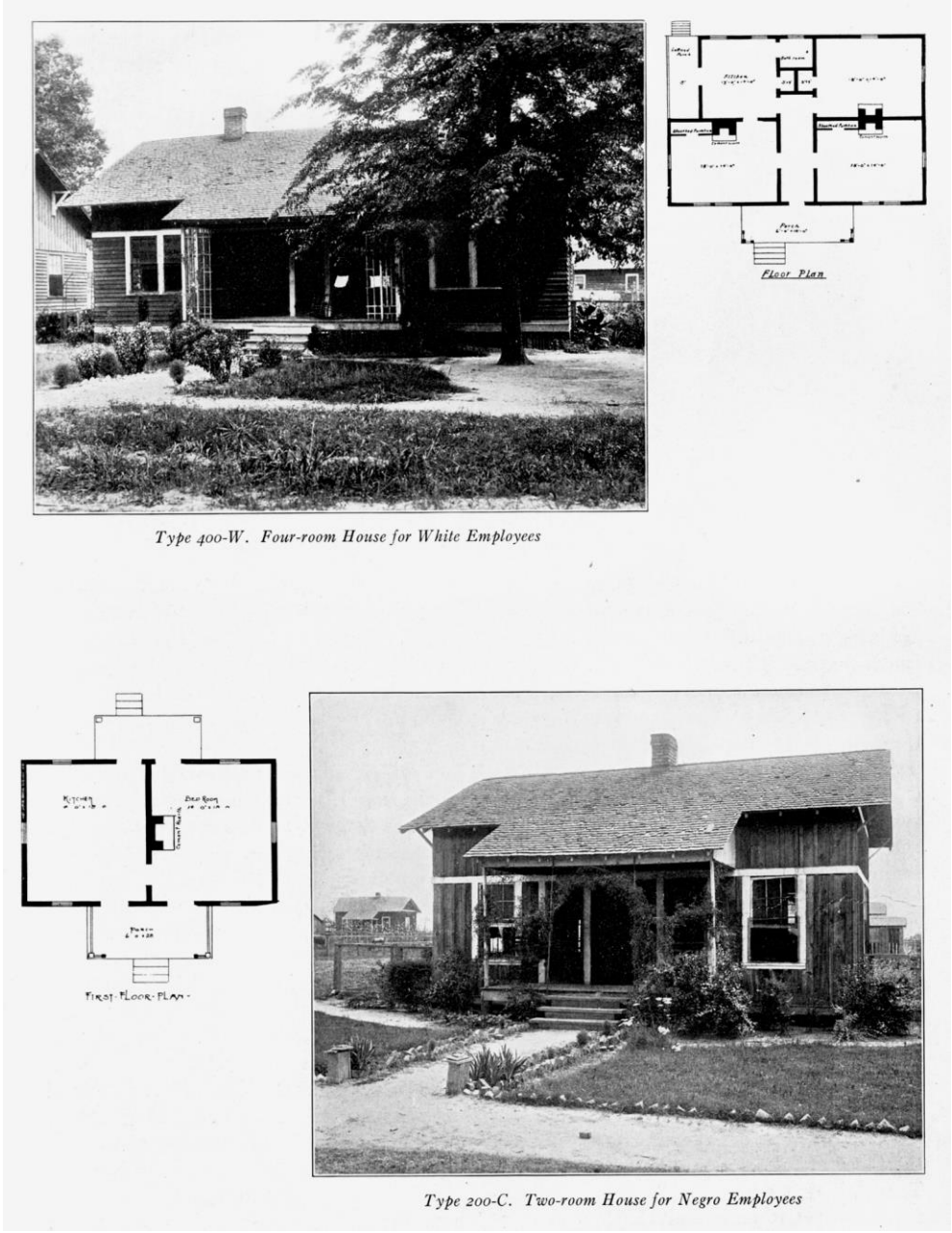


Figure 6.11 Four-room White house and two-room Black house, Kaulton. Homes for Workmen.

His talk before the Southern Pines Association made clear that according to President John H. Kaul, the houses were intended to retain good labor not to make a profit on their construction. The homes were not for sale, but lots were set aside for sale

to those who wanted to build homes for themselves. Most houses were rented on the formula of $2 per room for White employees and $1.50 per room for Black employees. Also, a charge for other buildings such as barns, stables, or garages averaged 60 cents a month for each place so average rents ran around $6.60 to $10.60 per month for White employees and from $3.50 to $6.75 per month for Black employees. Company expenses for maintenance, interest, taxes, and depreciation meant there was no profit, and sometimes a loss was incurred. Tenants were encouraged to keep their places in first-class condition with contests with substantial prizes. Opportunities for garden plots were provided by the large lots upon which the houses sat. The resultant community spirit and better class of laborers attracted by the beauty of the neighborhoods brought direct profit in terms of contentment and efficiency of the laborers.[450]

A more in-depth study[451] has been undertaken by the writer at Overton, a mining community located southeast of Birmingham in an area more remote from civilization. The comparison of Overton and the preceding towns should be indicative of the prevailing attitudes of Birmingham's prominent businessmen toward their employee housing, including the investors of the APC.

6.1.7 Overton

The spur railroad that linked the center of Overton to Birmingham permitted the shipment of its coal to anywhere in the world it could be used. Many of the original houses and structures remain in Overton today; some were renovated into commercial

[450] John H. Kaul, "Kaulton from an Investment Standpoint," in *Homes For Workmen; a Presentation of Leading Examples of Industrial Community Development (*New Orleans: The Southern Pines Association, 1919), 16.

[451] Marietta Monaghan, "Solving the Problems of Housing for the New Workforce in Alabama during the Years 1890–1950" Master's Thesis, The University of Alabama at Birmingham, 2004.

ventures and others are in sad disrepair. Except for the commissary, which was built of red brick, the original structures were constructed of pine lumber harvested and milledon-site by the parent company.

The Alabama Fuel and Iron Company was born out of the turbulent business and social environment of Birmingham during the depression of the 1890s. In 1905 Henry DeBardeleben, who had lost his personal fortune in an attempted stock-market takeover of TCI in 1893, formed a new company with the financial backing of Jesse M. Overton, a Nashville, Tennessee capitalist.[452] Together they bought 60,000 acres of mineral lands in the Cahaba coal fields of Jefferson, Shelby, and St. Clair counties in central Alabama that at the time were considered worthless by most geologists.[453] DeBardeleben had an idea that there was coal in the region. He was either better informed or just plain lucky; by 1935, his Alabama Fuel and Iron Company was the largest producer of commercial coal in Alabama and the only coal company that generated its own electricity.[454]

Charles DeBardeleben was regarded as the patriarch of the Alabama Fuel and Iron Company by his employees. He was called "Uncle Charley" by one and all (at least to his face), a title he encouraged by dressing as Santa Claus to hand out gifts to all of the children at the company-sponsored Christmas parties each year.[455] The DeBardeleben

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[452] White, 191.

[453] Joseph Squire published a study in 1890 that concluded the lands were likely to produce coal. For additional information on the surveys and life of this independent-minded character, see Joseph Squire, "Notes and Data collected from my Diaries and Note Books for the purpose of furnishing Material with which to form a brief Biography of my past life." The manuscript is undated, but the last entry was on March 3, 1908. Copies of the manuscript may be found at the Birmingham Public Library and the Mervyn Sterne Library at The University of Alabama at Birmingham.

[454] White, 191.

[455] Fred Marvin, *Alabama Fuel & Iron Company and Its People, a Story of a Visit to Happy Communities* (Birmingham, AL: Birmingham Publishing Company, 1939), 7. This was an apparent attempt at public relations, and from an extremely myopic viewpoint. The book was sponsored by the Alabama Fuel and Iron Company; it was essentially a company promotion.

family was socially prominent, having been charter members of the Birmingham Country Club when it was formed in 1898. Charles De Bardeleben served as president in 1919, following Robert Jemison, Jr. who was elected in 1917.[456] No doubt there was much talk of company towns both on the golf course and in the taproom.

The ore and coal fields of Alabama had been developed only recently so everything had to be built new or hewn from the wilderness in the outlying areas in a similar fashion to the APC camps. The Overton camp community, approximately eight miles east-southeast of Birmingham, was too far out of town to walk to work, and there was no public transportation to the area. There were very few improved roads; it was about an eighteen-mile, circuitous drive over rough hills and ill-forded streams to downtown Birmingham making this company town a closer match with the APC camps than any of the others cited here.

Overton is still located in a rugged hilly area bordering the Cahaba River. Men moved their families out to this isolated area because that was where work was to be found. Perhaps some wanted to escape the perceived evils of the rapidly expanding community Birmingham had become. In exchange for the opportunities Overton had to offer, and these were not negligible, families gave up the diversified shopping, churches, schools, and hospital facilities found in Birmingham as well as their family and friends who remained in the city just as the APC employees and their families did. The prospect of new, well-constructed houses and schools lured some, of course; however, at least a few families must have loyally followed the DeBardelebens for whom they had worked in

[456] Carolyn Satterfield, *The Country Club of Birmingham: Centennial History* (Birmingham, Ala.: The Country Club, 1999).

the past. Also, for a short time, the union troubles of the established mining companies in the city were avoided in Overton; this would prove to be an important aspect of the close-knit community that Overton was to become.[457]

The company operated a store or commissary (Figure 6.15), equipped with every up-to-date modern store device, including refrigerators for the markets. The motto of the company was posted in the store: "We do not want to sell you anything you do not need. We are anxious to sell you that which you really need."[458] In other words, the company was the final judge of what everyone really needed, and those needs were met.

In the early days of the camp, fireplaces had been used for heat, and cook stoves were fired with wood or coal; later, company-produced electricity became safer (and profitable for the company) with the addition of electric stoves and heaters rented to the tenants by the company.[459] Rents were moderate and well within the means of the low-

[457] Monaghan, "Solving the Problems of Housing," 44, 45. The elegant Birmingham home of Charles DeBardeleben, which was situated on the crest of Red Mountain, was designed in 1923 by Warren, Knight and Davis, one of Birmingham's largest and best-regarded architectural firms. DeBardeleben moved his family out to the mines at Overton to show solidarity with the miners in the 1930s during "the troubles." This was not a new idea; owners and supervisors had often lived side by side with the miners in the early years of Birmingham. It had been elsewhere proven this often eased communication between labor and management. Perhaps DeBardeleben felt that his family would be safer from threats of union violence if they lived out of town; eventually, though, the family moved back to their home on Aberdeen Road overlooking the city of Birmingham. Except for DeBardeleben himself, the social interaction was evidently minimal. Many debutante parties and ladies club functions continued to be held on a regular schedule at the farmhouse and at the little teahouse built for Mrs. DeBardeleben and her Birmingham friends down near the schoolhouse. This information was given in oral histories recorded in July 2000 by the author. Dale Fulmer, a long-time resident who was born in Overton to a coal mining family was also a historian of rare education and erudition. Residents Peggy Cheek and Leon Williams told the same stories, so the story was validated.

[458] Marvin, 6.

[459] Dale Fulmer, interview by author, Overton, AL, July 9, 2000. The company supplied the appliances and tenants were charged for the use of electricity at the rate of $2.40 per month for lights, $1.00 for a water heater, and $4.00 per month for an electric stove. This was paid as a part of the rent each month and at a standard monthly rate, irrespective of the amount actually used by the consumer. This information is contained in the "Ledger of the Alabama Fuel and Iron Company", which was lent by Dale Fulmer and it has been copied on microfiche in the Birmingham Public Library Archives. Dale and his father "Orb" Fulmer found the ledger and some lease agreements when they razed the old water treatment buildings. The

paid wage earner. Company housing consisted of predominantly four-room and a few six-room houses for workers with families. The worker houses had clapboard siding and wood-shingle roofs; double-hung, single-large-pane windows on the lower sash with three vertical mullions dividing the top sash, wood-shingle roofs sloped to provide a gable over a front porch with either an "I" or a "T" plan. These houses were an improvement on the "four-room square-top" built by TCI after 1903 (a practical design with two bedrooms, a kitchen, and a living room and with exterior water and plumbing, which sometimes included an outhouse, and a central chimney) because they were varied in floor plan, size, and placement on the rolling and sometimes very steeply inclined landscape. This was also an improvement over the old-style two-room tenements and shotgun houses commonly built in the Birmingham District twenty to thirty years previously. Doors and windows were the same style throughout the camp and were probably brought in from a millwork supplier in Birmingham. Houses had running water piped inside or access at an outside tap nearby. Other houses at Overton were built in the gable-fronted-bungalow style, with front and back porches (Figure 6.16). There was an effort made to provide the best that could be had without too much expense, so design was kept simple at Overton.[460] Company housing consisted of four- or six-room houses for the workingmen and their families. The houses were typical camp-style dwellings, with porches on the front and usually with a stoop at the back entrance. Other buildings were of greater size and complexity (Figure 6.15).

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elder Mr. Fulmer tore out some of the pages and gave them to miners to help prove their Black Lung claims.

[460] Fulmer. In the late 1930s, the Black workers were all moved to Subdivision Number 2, and all the Whites to Subdivision Number 1, but up until that time, the neighborhoods had been racially mixed since houses were assigned in the order that the laborers signed on with the company.

Figure 6.12 Overton Commissary Photos by Author 8-15- 2000.

Figure 6.16 Typical six room house in Overton, Subdivision #1 Photo by Author 8-15-2000.

Figure 6.17 Mine Foreman's House, Overton Photo by Author 10-10-1986.

The houses were similar in style, but all were different in appearance. Designed to be as comfortable and safe as possible, a few basic floor plans were modified to accommodate uneven terrain and to vary the styles at least in the front. The homes were set on foundation posts of mortared brick and sheathed in lap siding of finished lumber. Each house had to be placed according to the dictates of the terrain. As a result, there was an absence of the uniformity of streetscapes that can be observed in other area company towns such as Corey/Fairfield, Thomas, and Bayview, where the community had been

laid out by a professional town planner[461] and much more like the camp houses of the APC. Although present at Overton, the hierarchy was not as noticeable as at Sloss Quarters in Birmingham where the houses were color-coded and lined up in straight rows according to the job category and race of the occupants. (At Sloss, the colors signified the race of the occupant: red houses for Blacks and yellow houses for Whites.)[462] At Overton, houses were differentiated by size and location within the community but not by distinct blocks of one economic level or another (Figure 6.17). They are not packed closely together in regular blocks like the houses in Thomas but are more informally arranged although, again, more widely spaced than those at Bayview.[463]

Each house was further differentiated by the choices made by the tenant in regard to the trees and gardens planted and the level of care taken with upkeep. The grass in each yard had to be cut once a week. As was done at Kaulton and the APC camps, the company gave awards for the best- looking yards, and the ladies' garden clubs of Acmar and Overton were members of Garden Clubs of America.

Schools for both White and Black children operated nine months of the year with teachers paid by the county. There were also churches and community houses for meetings, as well as "talking pictures," libraries, parks, tennis courts, baseball fields, and swimming pools, all provided by the company. Whites and Blacks were given the same consideration as far as pay; working and living conditions; and, during this era, schooling.

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[461] George Miller, a nationally renowned landscape architect and city planner, laid out the city of Fairfield in the tradition of the Garden City movements which had recently been designed in England by Ebenezer Howard and Raymond Unwin. White, 82, 83.

[462] Notes from interview with Alonzo Gaines, steelworker, as recorded by the University of Alabama at Birmingham Oral History Research Office, 1984.

[463] White, Thomas, 131; Docena, 257; Bayview, 260; Mulga, 261; Republic, 281.

There were no racial difficulties for twenty-five years, but "a definite color line is drawn and is recognized fully by both White and colored."[464] In other words, everyone knew his place. All the children were required to garden at school, and there was also a night school for adults that was state supervised.[465]

By 1911 the Alabama Fuel and Iron Company produced one million tons from its four mining camps,[466] calculated to be about one-fifteenth of the total production of the state. The principal consumers of the company's domestic and steam coal were the Central of Georgia and L & N Railroads; however, the company also used its coal to generate its own electric power, transmitting it over lines leading from the central power plant to the mines and, later, to the worker's houses.[467]

There was no sewer system for the community. The typical arrangement originally was outhouses and later indoor toilets and gigantic septic tanks that serviced as many as three houses. This arrangement was better than average for the Birmingham area in the twenties. Mill villages such as Avondale on the south side of Birmingham had no sewers; the streets were unpaved, and communal water faucets supplied water for the workers. The Avondale housing and sanitation problems were typical and were duplicated in many other working-class neighborhoods in the area. More people lived in company-owned houses in Birmingham in the early 1900s than in any other place in

[464] Marvin, 7.

[465] Marvin, 45.

[466] There were four camps built by the Alabama Fuel and Iron Company, including the one at Overton. The others were similar to Overton in style. They were built at the same time and were located within twenty miles of Overton at Acmar, Acton, and Margaret in Shelby and Jefferson counties.

[467] White, 193.

America, at least while the economy of the Birmingham district was booming;[468] Birmingham, the "Magic City" grew so quickly in its early years that space was at a premium. The expansive space allotted to houses in Overton was rare.

6.2 Other Dam Towns for Comparison

The construction of behemoth concrete structures such as the APC dams precluded city or even town living. Sites that were suitable for the impoundment of thousands of acres of lake water were only possible where the topological features allowed containment of the water. These sites were typically high ridges with narrow channels for a river to pass between the hills. They were usually rocky and steep so the river dropped through a narrow channel often containing ferocious rapids filled with large boulders. Such land was not suitable for farming, so no settlers had placed enough value upon it to settle there. The dams were the highest and best use of this kind of land, but it was often remote and wild. It was not until the early twentieth century that such land began to have value.

6.2.1 Regional Site: Norris, Tennessee

Like the APC dams, Norris Dam only materialized after years of debate and deal-making between private interests and Congress. The United States Army Corps of Engineers (USACE) made an extensive study of navigation, flood control, and the production of hydroelectric power along the Tennessee River after the Rivers and Harbor Acts of 1922 and 1925. Contained in the USACE reports was the estimate of the cost of a hydroelectric dam near Norris, and a more detailed report followed in 1928

[468] Malcom C. McMillan, *Yesterday's Birmingham (*Miami; E.A. Seemann Publishing, 1975), 75.

recommending the design of a dam, powerhouse, barge lift, and spillway at the site (originally called Cove Creek but later named Norris Dam.).[469]

The contract for design and construction drawings was signed with the U. S. Bureau of Reclamation on September 15, 1933, and actual construction began two weeks later on October 1, 1933. By March 4, 1936, the gates of the dam were closed, and the water began to rise behind the dam. When the water level rose to 1000 feet above sea level (20 feet below the spillway crest), the water was released, and water flowed freely again on June 19, 1936. The first hydroelectric generator began service on July 28, 1936.[470]

The project was designed and constructed in a comparatively short time; it was a part of Franklin Delano Roosevelt's plan to put the unemployed masses to work while simultaneously strengthening the national economy. The TVA intervention was expected to bring not only a better life to homeowners in the cities and towns but to raise the education level and help liberate sharecroppers from the bonds of legal slavery widely practiced in the region.[471] Roosevelt spoke about his plan for the TVA's role in improving the lives of the people of the seven-state region that comprises the watershed. His remarks contained a personal observation about the poverty of people in Alabama that the APC was beginning to address.

> Power is really a secondary matter. What we are doing there is taking a watershed with about three and a half million people in it, almost all of them rural,

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[469] Tennessee Valley Authority, T. B. Parker, Chief Engineer and staff – contributors ,*The Norris Project, a Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Tennessee Valley Authority's First Water Control Project, Technical Report No. 1*, Washington, DC: United States Government Printing Office, 1940. pps. 8–9.

[470] Parker, *Norris Project*, 12.

[471] A discussion of using convict labor for public and private projects in the South will be discussed more fully later.

> and we are trying to make a different type of citizen out of them from what they would be under their present conditions. Now, that applies not only to the mountaineers - we all know about them - but it applies to the people around Muscle Shoals. Do you remember that drive over to Wheeler Dam the other day? You went through a county of Alabama where the standards of education are lower than almost any other county in the United States, and yet that is within twenty miles of the Muscle Shoals Dam. They have never had a chance. All you had to do was to look at the houses in which they lived. Heavens, this section around here is 1,000 percent compared with that section we went through. The homes here are infinitely better.
>
> So T.V.A. is primarily intended to change and to improve the standards of living of the people of that valley. Power is, as I said, a secondary consideration. Of course, it is an important one because, if you can get cheap power to those people, you hasten the process of raising the standard of living.[472]

The TVA, a new entity itself, was charged with creating this different type of citizen through the design and execution of a new planned worker village at Norris so that work on the dam could begin. This was the first project implemented by the TVA. Norris Dam and its employee village were similar to the APC's first construction project at Lay Dam in 1916 in that the U. S. Army Corps of Engineers and the Bureau of Reclamation, responsible for designing the dam itself, realized that the construction of the employee housing would have to be very closely linked to the construction schedule for the dam. To relieve the pressures in the Corps design offices, the design and construction of the permanent community at Norris was given over to the TVA, and Earle S. Draper became the TVA's director of land planning and housing in 1933. From 1934 to 1940, Mr. Draper was the authority's director of regional planning studies with broad responsibilities for planning.[473] This was the first time the TVA was given responsibility for town planning,

[472] Franklin D. Roosevelt. One Hundred and Sixtieth Press Conference at Warm Springs, GA November 23, 1934. Online resource: http://newdeal.feri.org/speeches/1934f.htm accessed December 8, 2014.

[473] Obituary for Earle S. Draper, New York Times, July 3, 1994. Digitized version accessed February 25, 2020. https://www.nytimes.com/1994/07/03/obituaries/earle-draper-100-tva-executive.html From 1940 through 1945, he was an assistant commissioner, Deputy Commissioner, and Acting Commissioner of the Federal Housing Administration.

and they had a limited time in which to complete the task. Although there were many inherent difficulties, the undertaking represented a rare opportunity to conceive of the camp and town as a creative design problem.[474]

Between 1933 and 1937, construction workers used eight basic floor plans made less homogenous by using altered roof slopes, changing the position of porches, and using different finishing materials. Because the TVA managed the work directly, a rapid construction start, reduced costs, and the ability to modify plans while construction was underway facilitated the building and allowed for the use of Norris as a research lab for new types of materials and structural systems. These included precast floor slabs and a house made entirely out of steel. Additionally, TVA required all materials and supplies to be mined, produced, or manufactured in the United States.[475]

Although it was no longer a new utility in the United States (but it was novel in rural eastern Tennessee), the TVA's research centered on the use of electric heating and lighting in the home. The appropriate levels of insulation and ventilation were studied in two houses, one insulated and one not insulated, and the finding was that the use of

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[474] Parker, *Norris Project,* 174.

[475] Avigail Sachs and Tricia Stuth. "Lessons from the Past: A Tennessee House for the Future." Journal of Construction History Special Issue on the Americas (2012), 9. Publication under final review. I was one of the reviewers and the quotes and information are taken from the reviewed material. See additionally: Marian Moffett. "Manufactured Housing: The TVA Experience." *ARRIS Journal of the Southeast Chapter of the Society of Architectural Historians* 5 (1994): 31–37. *"No Monotony in TVA Houses" Press Release by Earle S. Draper, Director of Land Planning and Housing Tennessee Valley Authority For Release at Will March 12, 1934*. RG 142 TVA Office of Economic & Community Development, Regional Studies Dept. General Correspondence 1940–1948 Box 46 Folder 156 N 132 Norris Housing 2 of 2, National Building Archives, Atlanta, GA. Also: The TVA archives have numerous examples of this management system. For example: "Provide T.C. flue lining as shown, 9"X9" for kitchen and 9"X8" for fireplace. Build the brick chimney, as shown, with attic ventilating flue with screened opening in the attic and above the roof. Finish the chimney top as shown, with offset courses and cement work." *Outline Specification for KF Type House Frame Construction, July 7, 1934*. RG 142 TVA Regional Studies Department, Architectural Records 1940–1948, George Richardson Files, Box 5 Folder Norris KF House, National Archives Building, Atlanta, GA.

insulation affected a savings of 44.75 percent in electrical cost to the occupants. This study was one of the first of its kind, and after the results were presented at a meeting of the National Mineral Wool Association,[476] and was used to promote that industry. The TVA continued to test and experiment, going as far as asking residents to relate their bedroom ventilation preferences, leading to several pieces of heating equipment that were placed on the open market.[477]

The TVA, in establishing a new town at Norris, not only provided housing for the construction workers who would rent directly from the TVA but rented to non-worker families as well.[478] Norris was furthermore planned as a model progressive town[479] and is still occupied today by working families who commute to Oak Ridge and Knoxville. Most of the original housing is extant and listed on the National Register of Historic Places.

Two types of access were considered; a highway to replace the inadequate narrow, steeply graded roads that flooded periodically, and a railroad connecting with "the nearest and most accessible point on the Southern Railway." The USACE recommended the highway to be more desirable, and the TVA agreed since a highway would be useful for the general public and the economic potential of Norris for much longer than the useful life of a railroad spur. At Norris the access roads and employee housing facilities were of

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[476] Thornbury, William D. "Mineral Wool Industry of the United States." *Economic Geography* 14, no. 4 (1938): 398–408. doi:10.2307/141533. Accessed on JSTOR September 27, 2018. Mineral wool, or rock wool, was used as insulation dating back to the early 1840s. Mineral wool was reported in an article, "The origin of Rock Wool," which appeared in the December 1936 issue of *Store Magazine*. The author said it was made in Wales as early as 1840 and in Germany as early as 1870. (Lang, Herbert, "Designing and Operating a Slag Wool Plant," Chem. and Met. Eng., Vol. 29, 1923, p. 365.)

[477] Sachs and Struth.

[478] Sachs and Struth.

[479] Tracy B. Augur, "The Planning of the Town of Norris." *American Architect* April (1936).

permanent construction from the very beginning, as the project was not considered a temporary one but the beginning of a new town that would become self-sufficient over time.[480]

This change in thinking is one of the things that sets Norris Dam apart from the dams constructed by the APC. Of course, the APC worker villages were designed to be ephemeral (and this practice was in use at the time all over the country), therefore, the roads would not have needed to be made permanent, but the changing American lifestyle was made apparent at Norris. The use of personal automobiles was much more common by 1933 than it was in the early 1920s, and the village at Norris had been planned to be a commuter community where workers could live in Norris and drive to work in nearby Knoxville and Oak Ridge.

6.2.1.1 Site

The town was planned as a permanent location for the TVA employees in the region. A secondary administrative center near Chattanooga was expected to become necessary, but the permanent operating force of the dam needed housing near their place of work. Norris could be used for both these purposes. The construction camp was planned to house 2500 workers at the dam site. Because the expense of constructing the roads, sewage, and water supply systems for a temporary camp would be nearly as much as for a permanent town, the housing was planned to have a longer useful life as an educational demonstration of the agriculture and industry possible in Eastern Tennessee. It was further expected that various industries would relocate to the town (even though there was no railhead) because of the availability of plentiful electrical power. This did

[480] Parker, *Norris Project,* 161–162.

not happen; the present population of Norris is around 1600, and although there are small businesses such as shops and restaurants, there is no big industry.[481]

A green barrier was intended "both to preserve the favorable sociological conditions that were created in the construction camp, and to protect property values in the permanent town."[482] The planners wanted a rational design that was sympathetic to the vernacular architecture of the region and "that would preserve the natural advantages of the surroundings."[483] Like the APC and other corporations at this time, they wanted to exclude certain groups that might interfere with their intended "favorable sociological conditions."

Although it was on a much larger scale than any of the APC camps, a unified development without monotony, consisting of homes intimately related to nature and healthy living was planned for the town of Norris (Figure 6.18).[484] A major change happened when the first 150 houses were designated to be models for the demonstration of electrical heating and electrical equipment such as stoves and toasters to encourage the local population to upgrade and purchase more electricity. This meant the first 150 families would have to have an income sufficient to pay the increased rent, which then

[481] City of Norris website accessed Nov 26, 2017. www.cityofnorris.com

[482] Parker, *Norris Project,* 174–175. The "favorable sociological conditions" were related in part to the vision of the construction labor being paid at a much higher scale than the local economy could allow. The "green belt" which would protect the community "from encroachment by shack development and nuisance areas." In other words, the greenbelt protected the town from the unwanted intrusion of Blacks, other minorities, and commercial development, while providing ample recreational space for children to play and families to walk and observe nature. Some of the most prominent features of the health and cleanliness of life at Norris demonstrated by interior and exterior amenities such as electric heating and the green belt of undeveloped land surrounding the town were of sufficient interest that agencies such as the F.H.A., P.W.A., the Resettlement Administration, and representatives of foreign governments and magazines visited Norris to inspect the innovations in town planning and small house design.

[483] Parker, *Norris Project,* 174–175.

[484] Parker, *Norris Project,* 176–177.

meant the houses would have to be upgraded again to a standard that would be acceptable to families of medium income. The quality and details of such houses brought extra costs to the construction so fewer of these houses were built. A second group of houses built at the lower cost and expectancy of less permanence or "homelike conditions," and a few local farmhouses were restored to save time. Although many of the building sites were not yet accessible by any road and planning was only partly completed, many of the first 150 houses were occupied by September 1934 even though the electric components were delayed for several weeks longer. Another group of 80 houses was designed in the spring and completed in the fall of 1934. Work went quickly after it was finally begun, resulting in the town essentially complete, including roads, utilities, and civic buildings by the spring of 1935.[485]

The construction of the structures in Norris was sound if not highly finished. It was designed for low maintenance costs, and construction costs were kept more manageable by the unified handling of the housing project under one entity, the TVA. The construction camp and the village successfully combined a mixed population, serving both the rural, unskilled laborers and the permanent employees of the TVA; some of the latter were highly educated, highly skilled, and from outside the South. After the transition to permanent occupancy, the town of Norris functioned mainly as a satellite to Knoxville, boasting a high-quality school and other municipal facilities. The TVA owned the whole town; it was not until June of 1948 that the TVA sold the town to a private corporation, which then began selling houses and lots to the public.

[485]Parker, *Norris Project.*

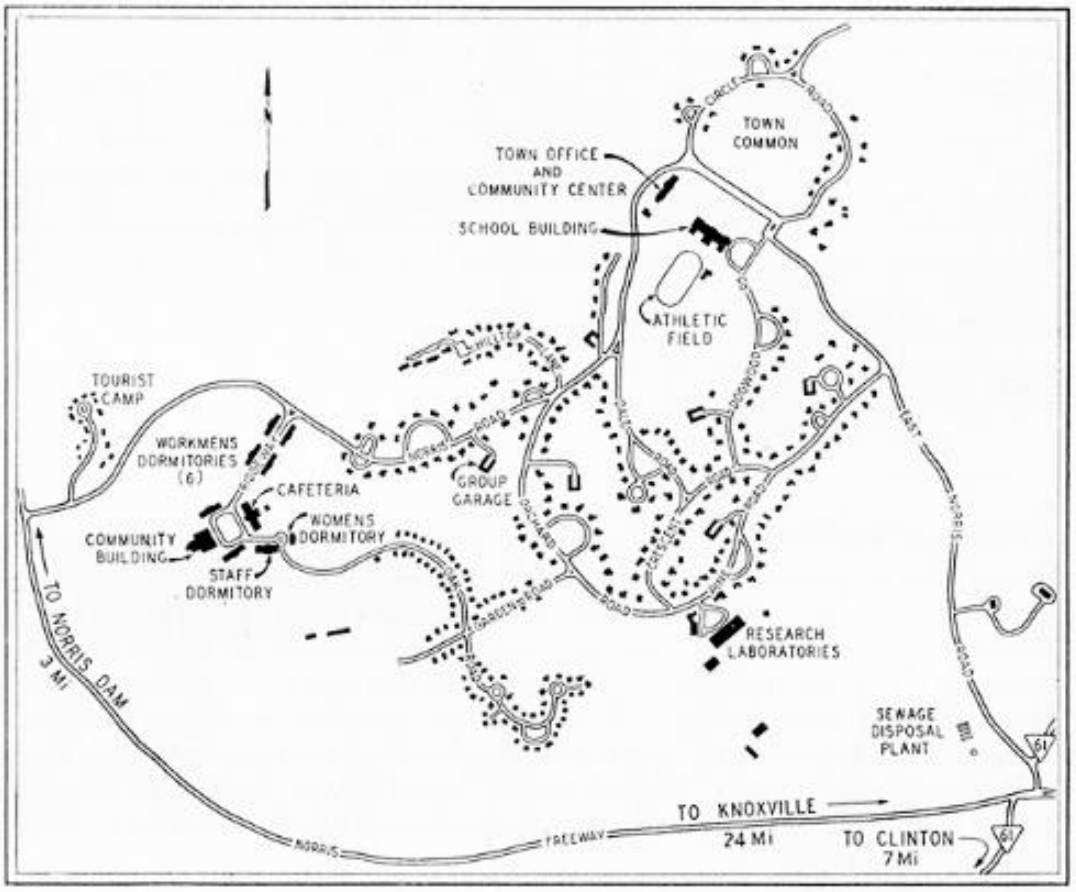


Figure 6.18 The Site of Norris, TN, TVA Norris Project.

As at the APC camps, the first structures to be built were for the construction crews themselves. The construction camp was on the western side of the site with the permanent village center and housing to the north and east. In the construction camp were the six workman's dormitories, the cafeteria, community building, and the women's dormitory. Cul-de-sacs with small groups of houses and scattered apartment houses were served by group garages placed conveniently near the homes. An athletic field was located on the school grounds with the town office and community center nearby. Across from the school was the town common, a landscaped recreational site intended for all the townspeople to share and enjoy. A sewage-disposal plant was located beyond the research

laboratories where it was as distant from the homes as possible to preserve the clean and healthy atmosphere of the village.

6.2.1.2 Structures

With all the innovative ideas in play at Norris, it is strange that the TVA designers did not challenge the prevailing aesthetics of the local building traditions. Instead, the architects carefully researched styles, materials, and massing to incorporate ideas from the local vernacular. Photographs and measured drawings were made of existing farmhouses to be used in the designs. Local materials such as wood shakes on the roofs, hand-split shingles, and stone foundations and chimneys helped the new community appear less "new." Sometimes the architects incorporated a "dog-trot" or "breezeway" (identified as design #22); others had traditional sleeping porches. However, the floor plans were like those used by other New Deal agencies across the county. The only modifications were that the interiors were designed to exhibit and celebrate the electric equipment installed in the homes.[486]

The TVA also experimented with "truckable homes" that could be constructed first in an outdoor assembly line but later in a specially built warehouse space by teams of carpenters, electricians, and plumbers. They were produced in parts that were then assembled and loaded on a truck ready to be placed on the prepared foundations with a crane.[487]

[486] Sachs and Struth, 15.

[487] Sachs and Struth. 15. This prefabrication and attention to what we now refer to as green building practices is the subject of the paper written by Sachs and Struth and presented at the Construction History Society in Boston in 2012. In 2008 a project team of faculty, students, Clayton Homes, Inc. (a manufacturer of modular and prefabricated homes), and the local residents of Norris, at the College of Architecture at the University of Tennessee, Knoxville, designed, constructed, and monitored the performance of a small single family house to study the "energy-efficient and green concepts and systems from construction through occupations," while respecting the "physical and historical context in which the

6.2.1.3 Men's and Women's Dorms

Originally, the men's dorms (Figure 6.19), were planned in a one-story "H" plan, but the scarcity of flat ground restricted the plan to two-story "I" buildings. The two stories saved on roofing materials but posed an increase in fire risk, so the dorms were frequently inspected and patrolled at night. The decision to heat electrically came too late to be implemented in the construction camp so a forced-draft system was used. In the dorms, the warm air was distributed by ducts that blew down from ceiling vents in each room, and the doors were cut six inches off the floor for cool air return to the hallways and thence to the basement. (Privacy must not have been as important as it is today.) Additional space for bedrooms was added in the basements when the topographical irregularities of the grade allowed. Stairs were placed in the center and at each end of the dorms. Each dormitory housed 118 men in two-man cubicles, approximately 8' x 9' with one window per room for ventilation in summer. Each cubicle had one table built in, restricting any rearrangement of beds. The basements were not divided but left open for bunks arranged along aisles. The dorms were built of light wood framing with board and batten sheathing on the first story and oak shingles on the upper level. Interior partitions were single layers of ship-lap siding, floors were oak, and the roofing was asphalt shingles.[488]

When the men's dorms were no longer needed at the completion of the construction phase, four were demolished by the Civilian Conservation Corps (CCC) and all plumbing, electrical, and any other salvageable materials were removed and delivered

house was built" (the town of Norris), and to better understand "off site, prefabricated construction techniques." It is well worth the read.

[488] Parker, *Norris Project,* 186.

to the TVA warehouse to be reused on other construction sites. The CCC forces then landscaped the site where the dorms stood, allowing the site to revert back to its original state as much as possible.[489]

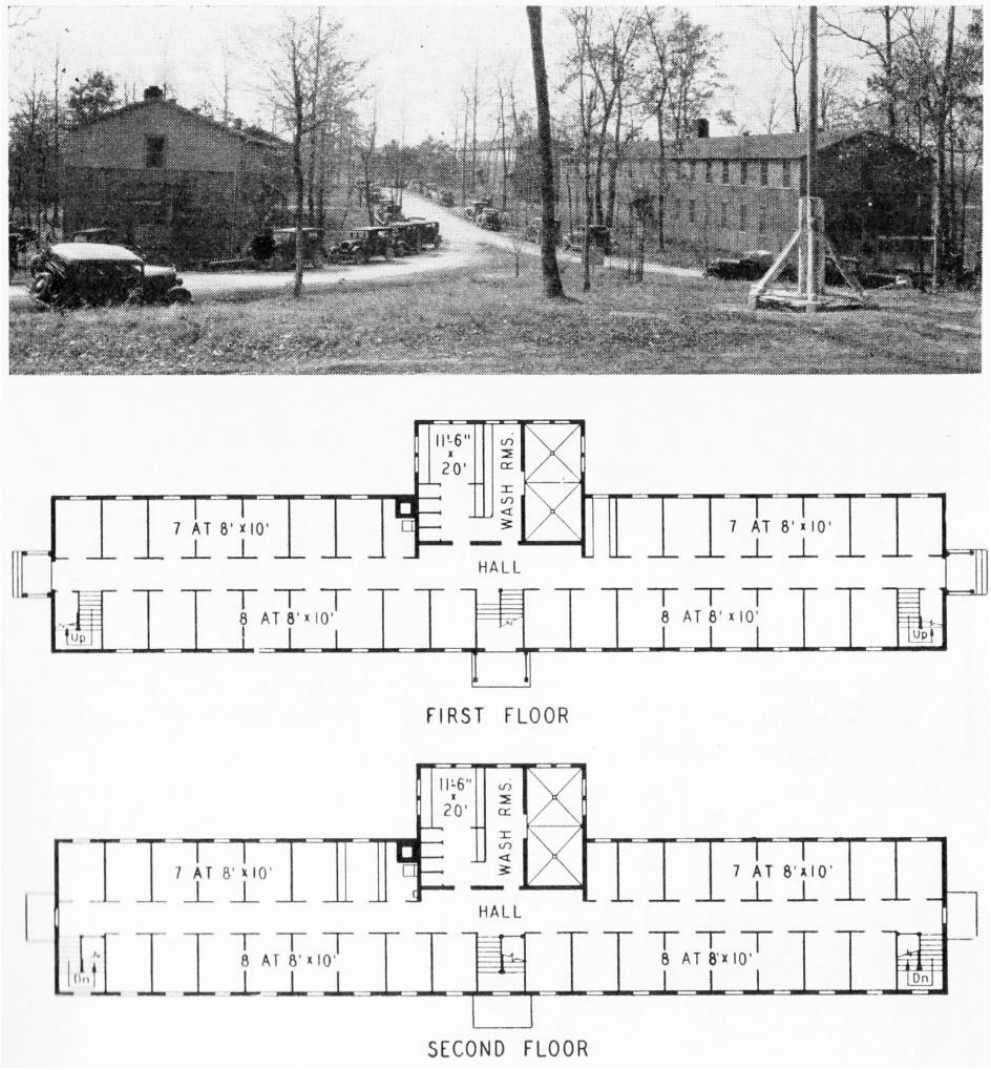


Figure 6.19 Typical workmen's dormitory, TVA Norris Project, 187.

[489] Parker, *Norris Project*, 187. The APC did not have the CCC available to help with demolition and moving the still usable structures to other sites. For them, the bottom-line dictated destruction if it were cheaper than starting over again. The CCC was a part of Roosevelt's New Deal, begun in 1933 and running until 1942. Free labor changed the equation for the TVA.

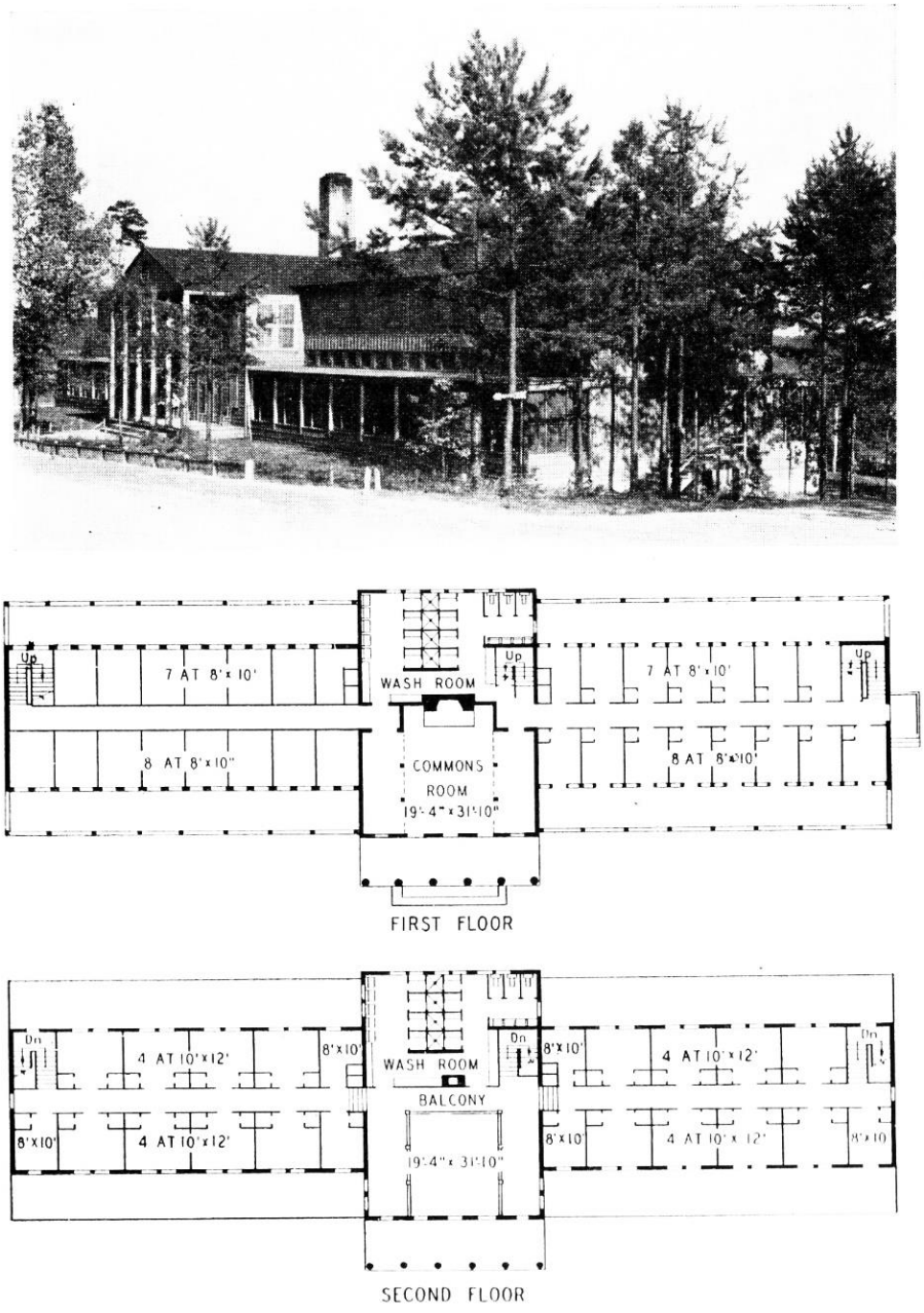
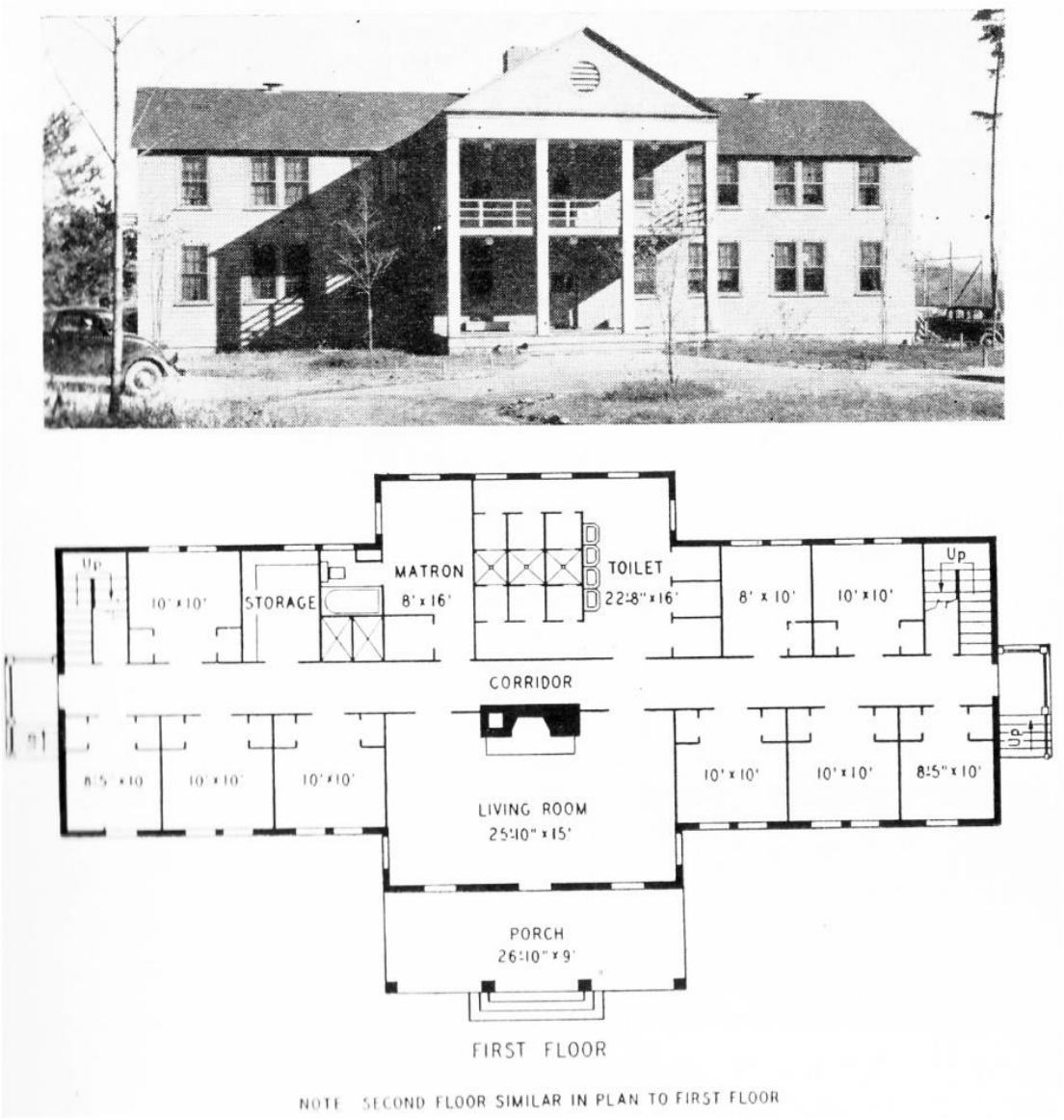


Figure 6.20 Staff Dormitory, TVA Norris Project, 188.

A staff dormitory (Figure 6.20) housed engineers who needed more space so they could work after hours. There were forty-two sleeping rooms of various sizes for either single or two-man occupancy. A lounge or commons room with a large fireplace and an

atrium extending the full height of the structure was centrally located. It had a gallery around three sides of the upper level. Screened sleeping porches were provided along the entire front and back of the building at ground level to provide relief from the heat in summer. Part of this building was used as an infirmary during the first part of the dam construction because no hospital was built.[490]



[490] 188–189.

Figure 6.13 Women's Dormitory, TVA Norris Project, 189.

The Women's dormitory (Figure 6.21), was like the men's dorms; though it had a smaller footprint, it also contained a living room with a cozy fireplace. It was later remodeled for use as an infirmary, and the women employees were moved to one wing of the staff dorm that had been used by the engineers. The two wings of the staff dorm were separated by a partition placed at the west end of the lounge.[491]

[491] 189.

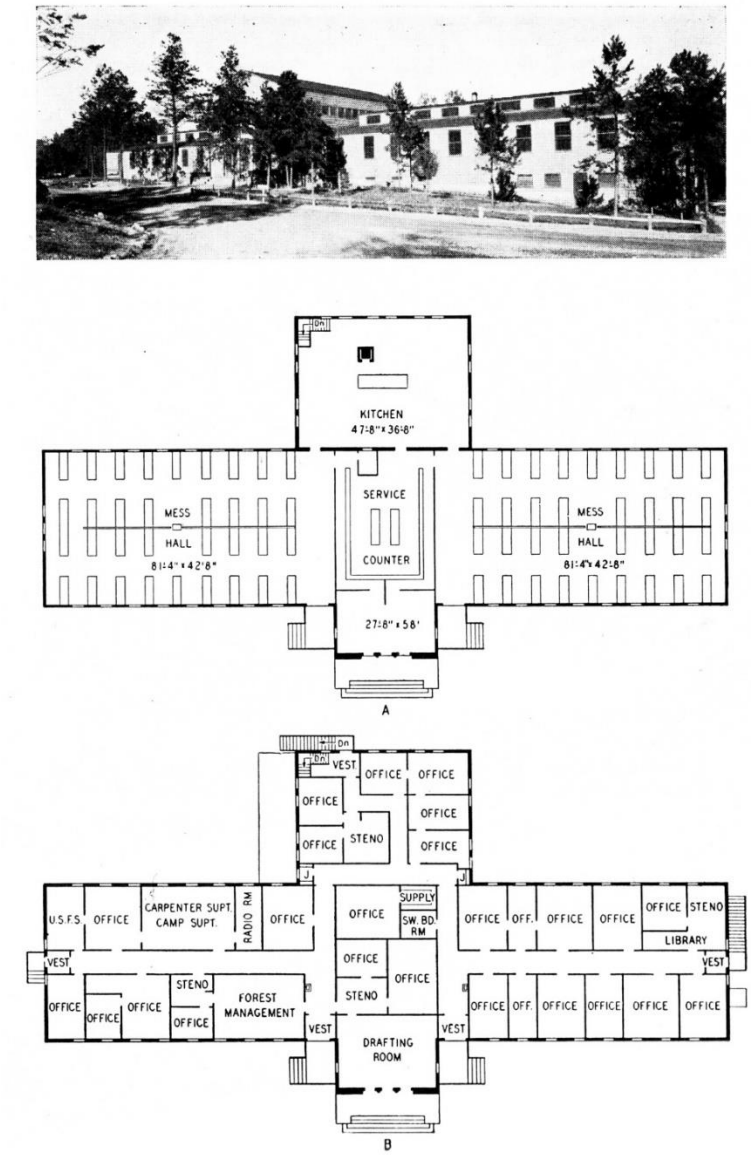


Figure 6.22 Cafeteria during construction phase, and as remodeled for offices, TVA.

6.2.1.4 Cafeteria

A cafeteria-style of service was chosen because several different shifts of different sizes had to be fed at all hours of the day and night. A centrally located cafeteria service counter was supplied from the kitchen at the rear of the building (Figure 6.22). The right and left wings were mess halls set up with tables in rows on either side of a short partition

and aligned with walls between the windows. Each wing had a coffee and water station in the center. Clerestory windows above the dining wings provided ventilation and light.

The entry porch projected from the center to shelter men in inclement weather. A cashier sat at the end of the service counter taking payment and giving access to a doubled cafeteria line, which contained a steam table and other necessary equipment. Food was prepared in the all-electric kitchen, and a room in the basement below the kitchen served the food tables via stairs and an electric dumb waiter. Like other buildings in the construction camp, the cafeteria was of light wood frame construction on a brick foundation. Linoleum covered the floors in the kitchen and serving space, but in the mess halls, the floor was common oak. After the construction of the dam was completed, the cafeteria was remodeled into an office building.[492]

6.2.1.5 Community Building

Expected to be the social center of the construction camp, the community building (Figure 6.23), was also used by the permanent camp until the town office and community center in the village was finally constructed. This meant meetings were scheduled back-to-back in each available room on some evenings.[493]

Designed to serve a variety of purposes, the community building underwent several changes over time. The front entrance lobby later was divided to house a temporary post office. In an interesting programmatic mixture, on the right side was a commissary and lounge; on the left was a library and two small reading rooms. Behind the entrance lobby was a combination gymnasium and auditorium that could seat 600

[492] 190.

[493] 185–186.

people. A smaller auditorium on the left could seat 150 people. To the right were restrooms and an office suite. Later, more offices were created by partitioning off spaces in other parts of the building.

Construction of this building was like the rest of the camp except that steel trusses and steel columns supported the roof. After the dam construction was complete, this building was again remodeled into a restaurant for the town, space for a Federal art project and a concession stand[494] increasing the attractiveness of the village for the permanent residents and surrounding vicinity.

[494] 191.

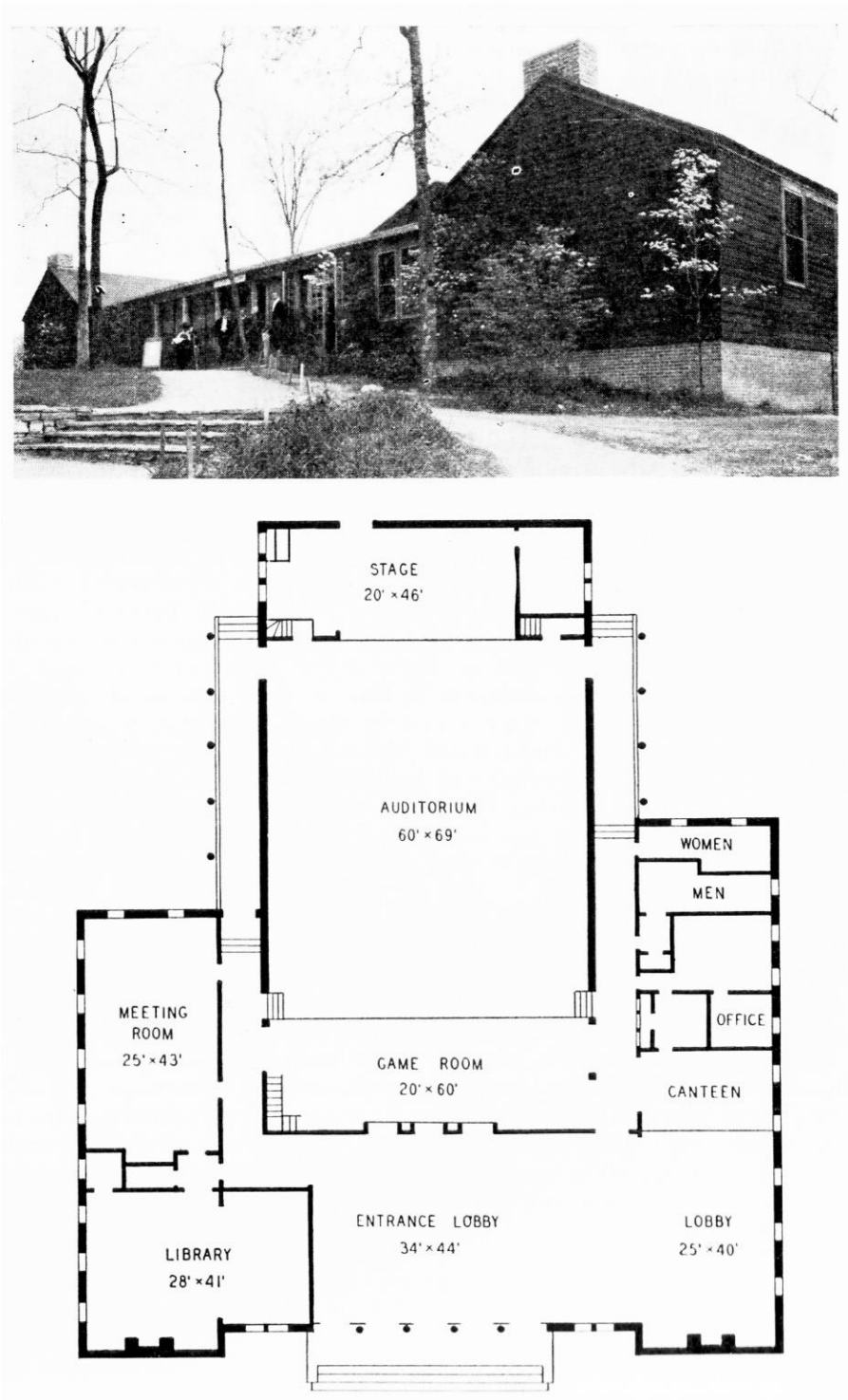


Figure 6.14 Community Building in Construction Camp, TVA Norris Project, 192.

6.2.1.6 Residential Section

In addition to the group living arrangements in the construction camp, "a residential section consisting of 152 electrified and insulated houses" was built. Another 130 lower cost houses most built of cinder blocks, ten duplex houses, and five apartment buildings were constructed. Thirty existing farmhouses in the vicinity were renovated for use by employees during the construction of the dam.[495] Because the topography was very irregular, grouping houses of three or more was difficult and was only done when the land was sufficiently level. On other sites, houses were placed in the best possible orientation and relationship to nearby structures.

6.2.1.7 Group One Houses

An approximate frontage of seventy-five feet was deemed desirable, but in some cases, only sixty feet could be obtained. View sheds were considered, and no house obstructed the view of another. This also provided better air circulation and privacy, but "economical relationship" to the topography was the main consideration. Houses were not built where the slope was too steep to construct a house without "excessively high foundations" or "considerable grading," factors in the cost trumping land usage concerns. There was plenty of land. The planners wanted to keep large trees to preserve the forest setting and for the cooling shade in summer. [496]

For these finer houses, the latest in interior features included an aluminum shower stall, modern lighting, an advanced type of insulation in the walls, and copper shields for termite protection. The ship-lapped wainscoting with plywood panels above was one of the forerunners of a type used for later towns of the TVA. Ceilings were left unpainted

[495] 193.

[496] 195–196.

and wood trim had a natural finish; the plywood was stained with a light coat of creosote. More attention was given to the exterior finishes; though some were left to weather on their own, some were painted, and some were only Whitewashed. For emphasis, special groups of houses were all painted the same color.[497]

Many house types were planned to further distinguish one form from another and to provide interest (Figure 6.24). In the first group of 152 houses, thirty-one types were designed ranging between 500 and 1681 square feet of interior space composed of between three and eight rooms.[498]

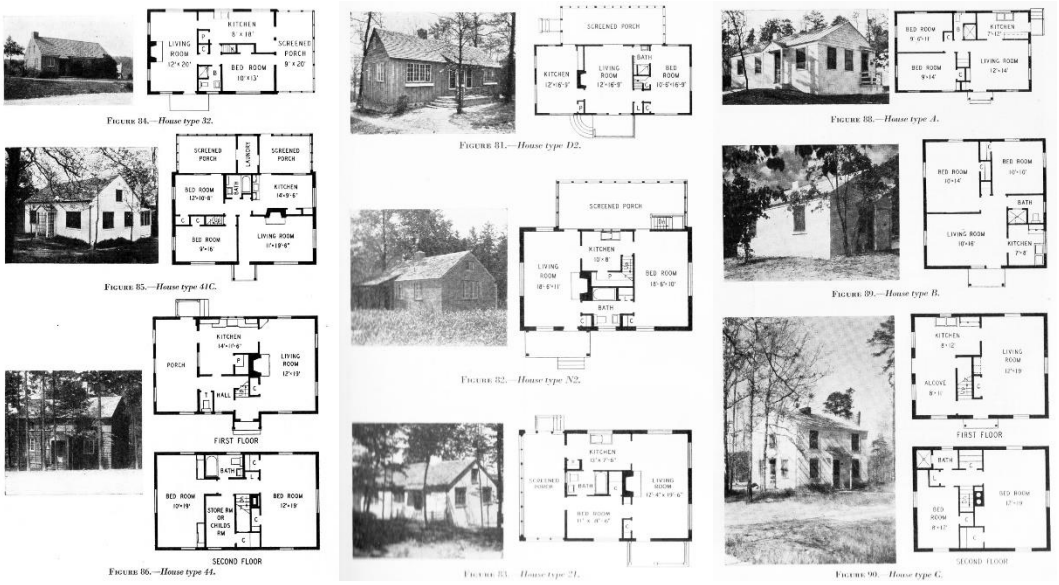


Figure 6.24 Typical Group One House Types: 32 41C, 44, TVA p. 198, D2, N2, 21, TVA p.197, and A, B, C (Group Two), TVA Norris Project, 200.

These typical layouts show a concern for the comfort of the families who would occupy the houses at Norris. Each house boasts a private bathroom, two or more

[497] 196.

[498] 196.

bedrooms, and a kitchen (sometimes very small, but a discrete, separate kitchen nonetheless.) Some houses were two stories, but many were simpler one level designs with large porches.

Brick veneer was the choice for the exterior finish on most Group One houses, but some houses had wood board and batten exteriors for economy and variety. Stone veneers were used in some cases, but the local stone required too much labor to be used frequently. One house was built with sheet steel to test its qualities in actual living conditions because sheet steel was supposed to be most economical. This house was constructed off-site; "the walls and other structural elements were purchased and erected by the manufacturer, but the Authority did all of the other construction work."[499]

6.2.1.8 Group Two Houses

About six months after the Group One houses were begun work started on the Group Two houses. Eighty houses (Types A, B, C, and D) were completed to move-in condition by October of 1934, and the remaining fifty were designed during the summer of 1934 and built the following winter in the part of the town previously developed as the construction camp.

Group Two houses were constructed with a cinder/concrete block for the walls. This was an important innovation because the permanent structural materials that were used also were the finished surfaces both inside and outside the house although special precautions were employed to ensure that the materials would not be worn down by the climate. This minimum quality material was considered suitable for lower-paid workers. Planned revisions to these buildings meant they could be remodeled later for a higher

[499] 202.

rental occupancy. For the two-story houses, piping and electrical equipment were placed in the hollows of the blocks, and a scheme for improving the outside of the house with stucco was detailed in the plans. The floor was of an innovative design with its precast concrete beams and integrally colored and highly finished concrete slab designed for low maintenance cost.[500]

Houses of types C and D had large rooms and were two stories. The other types were one-story houses with smaller rooms. None of the houses had a basement, and attic space was accessible through a trap door. Only house types K through C had porches. All these houses were heated by a coal or wood stove. The construction techniques were forward-looking with precast concrete used for floor slabs and walls, which made them "fire, termite, and rodent proof...[and] the walls have enough thermal insulating value" to keep the homes comfortable with minimal heating requirements.[501] The surfaces were finished with "one heavy coat of cement paint," as the apparent surface was felt to be adequate esthetically (in addition to its waterproofing characteristics) although stucco could be applied if desired by the occupant. The oversize slabs used for Types A, B, C, D, and K-C were replaced in the second group with standard size blocks. The houses had plumbing, electric lighting, and a coal range for both heating and cooking. Types K-C houses also boasted a fireplace in the living room for warmth, but the types A, B, C, and D had flues for heating rooms with extra stoves, and the hot water tank was placed in the one bathroom so it could warm that space.[502]

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[500] 202–203.

[501] 199.

[502] 199–202

6.2.1.9 Duplex Houses

There were ten duplex houses. Each was one-story frame construction, and each unit had a living room, one bedroom, one bathroom, and a kitchenette. They were of low-cost construction and combined heating and cooking on a coal or wood stove. Two families lived side-by-side in each duplex. Both the duplex houses and the apartment buildings were built using low-cost framing construction techniques like the Group 2 frame houses.[503]

6.2.1.10 Apartments

There were five apartment buildings, three of which contained thirty-one four-room units. Three additional buildings each contained four units, and there was one that had eight units and one with ten units.[504] These buildings were also of frame construction with interiors like the finish in the Group One houses. Cooking was electric, and the heat came from a central steam plant.[505]

6.2.1.11 Landscaping

Grading was as minimal as possible since the builders recognized that excessive grading would expose large areas to erosion and because the trees around the house sites and other structures would have had to be cut down, resulting in a much less satisfying landscape. The topsoil was not usually kept; it was stripped off and relocated to a holding area when possible. A few rock retaining walls were installed at the rears of houses that sat on steeper grades.[506]

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[503] 201–202.

[504] 201.

[505] 201.

[506] 204.

Although additional landscaping was left to the tenants, the TVA did improve the soil in the first year by seeding large open areas with a mixture of cowpeas and Johnson grass during the summer. This first-growth was plowed under in the fall, and ryegrass and mixtures of permanent grasses such, as lespedeza, were planted in the spring. Steppingstones were provided to connect the house entrance to the sidewalk, and crushed stone was used in service areas and kitchen entries.[507]

The TVA furnished a broad selection of plant material to their tenants, and advice from a resident landscape architect was available to help with design. The tenants did their own planting, however, and if they wanted to do more than just the standard foundation planting, the plant materials continued to be available to them for some time. The TVA planned and installed plants on the school grounds, the community center, the five apartments, and large open areas around the town, including the town common.[508]

6.2.1.12 Parking Garages and Service Roads

Because the roads were sometimes steep and to avoid extra expense, group garages were provided instead of individual garages for the first group of 152 houses. These garages (Figure 6.25) were located near the centers of the irregular shaped blocks, and one or more driveways connected each garage with the street. The typical group garage could house twenty-five autos in a U-shaped structure closed on three sides with the fourth side enclosed only partway down from the sloped roof. These group garages were more inconvenient for some than others so parking areas adjacent to the main roads and service roads were also provided for those who preferred leaving their cars outside

[507] 204.

[508] 204.

instead of taking the long walk to the garage.[509] The coming of the automobile had greatly impacted town planning by 1933 as evidenced by the need for garage parking in the first group of houses for elite workers at TVA.

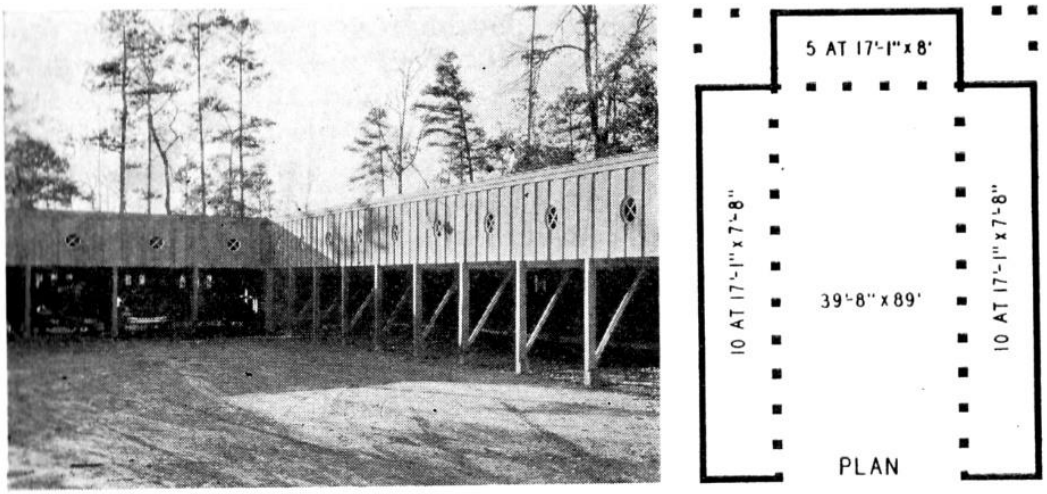

Figure 6.25 Typical group garage, TVA, TVA Norris Project, 205.

Later, some of the houses were designed to be heated with coal instead of electricity, and more garages were built to store the coal as inconspicuously and as near the houses as possible, utilizing the existing service roads.[510]

6.2.1.13 Recreation, Health, and Safety

TVA was concerned about the spread of malaria and other diseases in the company town; this was another reason for not concentrating on the town in one area. In Alabama, there had been at least one highly publicized, but unsuccessful lawsuit brought by people sickened by malaria near the lakes rising behind the dam construction sites. TVA also established a program for the development and management of fisheries and game,

[509] 205.

[510] 205.

including birds and mammals. A fish hatchery was constructed just below the dam to provide fish (particularly large-mouth bass, a game fish) to stock the reservoir. Game management areas, refuge areas, and wildlife sanctuaries were maintained to increase "quail, grouse, wild turkey, deer, and economically important furbearing forms" of native species, and exotics were not introduced. Hunting was allowed by permit, but no fires or "mutilation of trees or disturbance of wildlife" was allowed.[511]

In addition to hunting, the public was eager to take advantage of the opportunities afforded by the new lake for boating and swimming. The TVA was not authorized to develop facilities for the public use of the lake so the National Park Service and the CCC were enlisted to develop two "demonstration parks and a boat harbor" with the TVA contributing the land, some materials, labor, and construction supervision. This activity led to the creation of Tennessee's first State Department of Conservation, including a Division of State Parks, which began to plan, and construct state parks based on the model of Norris and Big Ridge (another TVA park facility.) The Norris Park was leased to the State, which would maintain and operate it after completion. TVA also developed a boat landing including "boat docks, boathouses, comfort stations, minor repair facilities, provisions for parking automobiles and trailers, a gasoline service station, and other items necessary for the convenience of the large numbers of pleasure craft using the reservoir." Within two years of the reservoirs' completion, over 1200 boats were in use on the lake. Nine other boat docks were in operation on the lake by the summer of 1938, all operated by concessionaires. The TVA established rates for services that were the same all over the lake. Because it was in the South in the 1930s, TVA also planned a "Negro recreational

[511] 554–555.

area" on the lake to be developed and regulated by the TVA to "insure (viz.) [an] orderly and well-planned development will be adopted."[512]

In Norris Park, consisting of 3,887acres abutting the town of Norris on the south shore of the reservoir, the amenities included picnic grounds with parking, shelters, toilets, table and bench combinations, ovens and drinking fountains, and a campground for trailers or tents. The campground had a centrally located bathhouse, electricity and water, tables and benches, and a lodge that contained a tearoom and small store. There was an outdoor theater seating five hundred people. Twenty rustic-looking cabins were constructed (five of them were duplexes), all with running water and most with toilets and showers although five were located near a community bathhouse for the more budget-conscious. All cabins included small kitchens and were heated by fireplaces in the open-plan layouts. A riding stable was operated during the summer season along with a floating dock for experienced swimmers. The cabins proved popular enough to require reservations weeks in advance. The park was open from mid-April to the first of November with an annual rate of near 100,000.[513]

An even larger park, Big Ridge Park, was nearly surrounded by water including a small dam built to allow swimming unimpeded by boat traffic on the lake. This formed Big Ridge Lake on one of the sloughs of Norris Reservoir. Sand was imported to form a beach for swimmers and a wading pool and beginner's pool were paved with concrete and separated from the deeper water. A diving platform, springboard, and floats were provided in additions to the boats and canoes for rent. Cabins, bathhouses, washhouses, a

[512] 557–558.

[513] 558–559.

centrally located lodge with tearoom and store, and a central dining room were constructed so the camp could be rented to Girl Scout and 4-H groups. With free admission to the park during the week and ten cents a person on weekends and holidays, this park was visited by about 50,000 people a year.[514]

While Norris was bigger and better appointed than the APC camps, it was intended to be a permanent bedroom community for TVA workers and others who would be able to commute to work in Knoxville, necessitating the various typologies of housing. The TVA had more money to spend than the APC and was in the process of learning just what they could do to improve upon old models for employee housing. Some of the engineers who worked for the APC left there for jobs with TVA and brought their experience and expertise with them, transferring important ideas about company towns to their new employer. The TVA was another example of benevolent corporate welfare along the same lines as the APC. We will see next that this was not the case in Nevada.

[514] 560.

Figure 6.26 Boulder City at Hoover Dam, 1931–1934 the dam that harnessed the Colorado River to do "man's will and man's work" Courtesy Bureau of Reclamation

6.2.2 National Site: Boulder City, Nevada

Over seventy-five years have passed since the completion of the great Boulder Dam (now known as Hoover Dam), in the Black Canyon of the Colorado River. The project pioneered many new construction techniques and building practices that are the typical approaches used today, the birth of one of the largest construction contractors (Bechtel Corporation), and the impoundment of the largest body of water in a man-made lake in the United States, Lake Mead, which stretches as far as the eye can see atop the canyon floor. The dam was constructed to control flooding and to provide irrigation for the crops in California's Imperial Valley, and almost as an afterthought, to generate electricity for the insatiable cities of Las Vegas, Los Angeles, San Diego, and other growing western communities such as Phoenix and Salt Lake City. This is a different

ordering of priorities than that of the APC, but flooding had been a tremendous problem for generations in the fertile farming valleys of California, and no one dreamed how much those cities would later grow.

The company town (Figure 6.26), constructed for the workers and their families formed the kernel that grew into today's suburb of Las Vegas called Boulder City. But there was a dark side to Hoover Dam's hulking mass. One hundred and twelve workers died during the construction from falls, avalanches, drowning, or heat prostration, and countless more sickened in the heat. No concrete number is known for the deaths and illnesses of the families of these workers, who also suffered from extreme temperatures, crowded living conditions, poor ventilation, and bad water as family members were not insured by the company, and records were not kept for them. A hospital was opened in Boulder City in early 1932 by Six Companies so injured men did not have to suffer the thirty-mile ambulance trip into Las Vegas, but only company workers were treated there.

Conditions were very rough for the people during the construction phases, but the most important thing appears to have been the bottom line. In Alabama, a paternal owner (the APC) ensured that the workers and their families did not lack for essentials even if the construction camps were nowhere near as comfortable as town life might have been. Apart from the difference in scale, there are similarities between the Alabama sites and Boulder City as far as the type of construction and timelines, workloads for the men, the food and entertainment, etc., but the weather and employment conditions were far less forgiving in the West.

Boulder City (with an elevation about 1200 feet higher than the final crest of the dam) was located seven miles southwest of the dam on a high plateau that was projected

to be cooler than the construction site in summer. An asphalt highway twenty-two feet wide laid from the city to the worksite was expected to withstand the weight of fifty-ton trucks and 150-passenger transport vehicles that brought in workers from the construction camp. A railway spur was laid consisting of seven parallel tracks to steadily ship materials from Boulder City to the construction site on the rim of Black Canyon, but later the railway was extended to the bottom of the canyon to facilitate construction.[515] This project was a tremendous undertaking of unprecedented size and scope.

6.2.2.1 The Construction Company

A group of businessmen banded together to bid on the project because separately they were not able to obtain the bond required for bidding. The eponymous Six Companies included a couple of bridge and tunnel contractors (Pacific Bridge and J.F. Shea Co.), the Idaho company Morrison-Knudsen (experienced in dam construction), McDonald and Kahn (a San Francisco construction firm), Utah Construction, and a paving firm (Henry J. Kaiser), which paired with Bechtel Excavation[516] all working together to win the contract as one entity. Six Companies built a hospital for workers who paid $1.50 per month for medical care, but the policy did not include their families. Kaiser went on to become Kaiser-Permanente the great health insurance carrier.[517] (The APC provided medical care at its camp hospitals that served employees and their families

[515] Jerry R. Rogers, "The New Town of Boulder City: City Planning and Infrastructure Engineering for Hoover Dam Workers" in Proceedings of the Hoover Dam 75th Anniversary History Symposium, October 21–22, 2010 in Las Vegas Nevada, Richard L. Wiltshire, David R. Gilbert, Jerry R. Rogers, editors, Reston, VA: American Society of Civil Engineers, 41.

[516] Michael Hiltzik, *Colossus, Hoover Dam and the Making of the American Century*, New York: Free Press, 2010, 162–175, 404. Bechtel ultimately became the same Bechtel that settled the Big Dig controversy for $407 million to escape rumored criminal charges and blew out the flaming oil fires kindled after the first Gulf War.

[517] Michael Hiltzik, *Colossus, Hoover Dam and the Making of the American Century*, New York: Free Press, 2010,

via a subscription policy. The employee signed up to have an agreed amount deducted from his pay, and this was used as self-insurance against extraordinary charges. APC Hospitals provided preventative care because it was in the best interest of the company, but injuries and illnesses that occurred off the job were covered by the employee's balance at the time of billing.)[518] The dam-building project took only four years to complete (1931 to 1935) coming in two years ahead of schedule at the height of the Great Depression and was one of the largest public works projects in American history. The dam project was so big that writers like Micheal Hiltzik have argued that the American sense of identity was forged here, the "sense of community overtaking rugged individualism."[519] Despite the Great Depression, more and more trucks and automobiles were on the road, and there were better roads and more of them as well. By the start of dam construction at Boulder City, jobs had become so scarce that men drove or hitchhiked by any means available to apply for the jobs promised in newspaper advertisements or relayed by word of mouth. Their families were hungry. If the job did not materialize, the men would stay at the construction site hoping for work the next day and the next.

[518] _____, Superintendent of Production, to Mr. C. O. Lineberry, Superintendent, Warrior Steam Plant, Gorgas, Alabama no March 29, 1923. The memo delineates the $108.80 bill received by the company for Mr. F. E. Parker, an epileptic, who was sent to St. Vincent's Hospital in Birmingham, and directs Mr. Lineberry to send a check for the $68.oo in Mr. Parker's account, the remainder of which would "be handled by the Company." I encountered several such memos in the DCC accounts, doubtless there are more.

[519] Robert C. Moore, book review in *Library Journal*, May 1, 2010, of Michael Hiltzik, *Colossus: Hoover Dam and the Making of the American Century*.

Figure 6.27 Google Earth Satellite View of Boulder City in the present day. Note how much green there is in contrast to the surrounding areas. Courtesy Google Earth accessed September 27, 2018.

6.2.2.2 The Beginning of the Company Town at Boulder City

It would have been wisest to construct a town for the workers before the actual construction of the dam began as was done earlier in Alabama and Tennessee, but the Depression pushed men and their families to settle in tent camps so that when jobs were advertised, the men were there to accept them. Thousands lived in temporary camps such as Ragtown and McKeeversville to be immediately available for work, but the government wanted these camps cleared out because they were both ugly and unhealthy although they were providing a ready source of labor. A site was chosen by an engineer

with the Bureau of Reclamation, Walker R. Young (Figure 6.27).[520] Then in 1930, the Bureau of Reclamation selected Saco Reink DeBoer as the city planner for the new company town that would supply residences for the workmen. This almost instantly created the third-largest city in the state of Nevada, Boulder City. Over 1500 homes were constructed for the 5000 workmen and their families. DeBoer had gained his experience in several western states and with the Denver Parks and Parkway System where he had implemented a plan for superblocks arranged around central park spaces, an easy-to-realize plan for the desert. This successful design was deemed by DeBoer to be the correct plan for Boulder City, making it the second (after Washington, DC) completely planned and federally constructed city in the United States.[521]

At the peak of the construction, there were 5,250 men at work on the dam. DeBoer was the city designer, but Six Companies was the general contractor. Like the APC, Six Companies formed a subsidiary company to build the town, setting up the Boulder City Company to build the homes, fire protection, recreational parks, and transportation to and from the dam. The Boulder City Company also provided laundry service and boarding houses for unmarried men.

Although the area was very sparsely settled, when Congress passed the Boulder Canyon Project Act in December of 1928, the local people celebrated wildly. They knew it was the beginning of a boom in business. Leon Rockwell described the celebrations:

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[520] Dunar and McBride, 57. Walker Young led investigations for potential dam sites in Black Canyon and Boulder Canyon during the early 1920s. He later became the chief construction engineer for the construction of Hoover Dam.

[521] Jerry R. Rogers, "The New Town of Boulder City: City Planning and Infrastructure Engineering for Hoover Dam Workers" in Proceedings of the Hoover Dam 75th Anniversary History Symposium, October 21–22, 2010 in Las Vegas Nevada, Richard L. Wiltshire, David R. Gilbert, Jerry R. Rogers, editors, Reston, VA: American Society of Civil Engineers, 40–47.

"we got the firetruck out and – my God, everybody that could hooked on to it! In carts and baby buggies and everything else – just like they was nuts. There was people that got lit that never had taken a drink before."[522] Later, when the official word came out that the dam was going to be built, people began to flock to southern Nevada because this was one of the few places work was to be found after the Stock Market Crash of October 1929. Men who had lost their jobs just packed up their families and drove there without knowing whether they would be able to get a job. People were that desperate – and proud. Wilfred Voss related that "you found men that were managers of concerns, presidents of banks. They were down there working so they wouldn't go on relief, just like this fellow right here. I wasn't about to go on relief."[523]

Mother and children camped in the desert near Las Vegas while father looks for work on Hoover Dam, 1931

[522] Dunar and McBride, Leon Rockwell interview, 16.

[523] Dunar and McBride, Wilfred Voss interview, 36.

Figure 6.28 Courtesy Bureau of Reclamation.

In the early stages before the construction began, surveying camps were established on a temporary basis near the banks of the river. The APC crews lived in tents while the land was being cleared or if their work area shifted each day as more wires were run; tents were used because of the movement of the central activities of these crews. In Nevada, the people had come looking for work just camping out when they arrived because they had nowhere else to go (Figure 6.28). There was no running water in the tents, and outhouses were the only sanitary facilities. Later pipes were installed so people could get water from a faucet. In the evenings, people would sit around a big campfire and sing. It was the only entertainment, but people had a good time according to Dorothy Nunley, wife of Tex Nunley, one of the first employees on the job. However, the heat was so bad people put their blankets on the ground and slept outside, wetting the sheets to evaporate some of the heat so they could sleep.[524]

6.2.2.3 Proximity and Elevations

Despite providing the valued comforts of shelter and sustenance, there was no mistaking Boulder City for anything less than a fortified camp. The security gate at its entrance, erected during a period of labor unrest in 1931, was there to remind all who entered that rules were enforced. Any hint of the gambling, drinking, or prostitution that flourished down the highway in Las Vegas[525] was strictly banned.

[524] Dunar and McBride, Dorothy Nunley interview, 35.

[525] PBS series American Experience on Hoover Dam, and American Experience Online, http://www.pbs.org/wgbh/americanexperience/features/general-article/hoover-building-boulder-city/, accessed July 3, 2014.

6.2.2.3 Social/Job Hierarchies

The workforce at the Boulder Dam construction site was a mixture of Central Europeans, local Mormons, and itinerant workers called hobos or bums during the Great Depression. Immigrants were paid the lowest wages even though they were often better educated and had better skills than the locals. Poor working conditions leveled all men to the lowest common denominator. Without any provision for wholesome after-hours entertainment near the site, there was nothing for workers to do except gamble and drink. Weekends were the worst, especially in summer when the stifling heat exacerbated fistfights and labor disturbances. The supervisors did not seem to have understood that they themselves had created these conditions and that the constant threat of unionization was very real. Labor unions had grown quickly since 1910 when the socialist Western Federation of Miners joined with other groups to form the Industrial Workers of the World. Nicknamed "the Wobblies," the unionists would send spies into work camps to foment strikes and shutdowns. Shrewd foremen cultivated a network of informants among their workers,[526] some of them in Boulder City.

Minorities were not allowed to live within the gates of Boulder City although a few Blacks worked as minimum-wage laborers who suffered the indignities common at the time such as separate transportation to the work site, separate water buckets, and exclusion from local housing. Given that separate housing would have had to be provided, it would have been "impractical to plan on their employment" according to Six Companies, even though Blacks would have been "desirable on account of the extreme

[526] Hiltzik, p.132–133.

heat."[527] In truth, there were few African Americans residing in Las Vegas when the project was commenced, and Sims Ely, Six Companies Boulder City manager, was openly hostile to them.[528] On the other hand, Native Americans were highly prized as "high scalers" the men who operated drills, crowbars, and dynamite "while dangling at the end of thin ropes hundreds of feet above the jagged rocks of the canyon bottom."[529]

The superintendent of the Boulder Dam project was a tall, lanky Yankee from Maine named Frank Crowe, who often was referred to as "Hurry-Up Crowe" by the "5,000 men jammed in a 4,000-foot canyon" as Crowe later recalled. Crowe built three more dams after Boulder, including Shasta Dam in California, which also came in ahead of schedule.[530] Crowe had the ability to drive his men forward quickly, and although some disliked him, many respected his ability to transfer his vision of a shared goal, no matter the weather or the danger or the limits of human strength. Crowe communicated his pride in the creation of something so important to the growth and production of the area; men were proud to also have had a hand in it.[531] Because he was so widely recognized for his "can-do" attitude and problem-solving abilities, he was considered the only choice suitable for the largest dam on earth, but there were flaws in Frank Crowe's handling of his crews. He was able to keep the respect and authority of his men by letting others do the dirty work and catch the blame if things went wrong. Crowe usually left the job site when work stoppages were treated with ruthless authority; responsibility for the

[527] Hiltzik, 316.

[528] Hiltzik, 318.

[529] Hiltzik, 274. Hiltzik quotes an unnamed Six Companies official who also said, "it was a job that only youths relished."

[530] Hiltzik,.407–408, and 124.

[531] Hiltzik, 128.

inhuman working conditions, unnecessary deaths on the job, unforgiving deadlines, and blatant discrimination both ethnic and racial, were transferred to the foremen and contractors, who thought more about the bonuses they would be getting if the work came in ahead of schedule than the pain and suffering of their men.

He also was a talented self-promoter who felt no compunction at returning just as the crews realized that their demands would not be met to offer a compromise of tiny proportions that would effectively show both sides in a good enough light that they were able to save face and even feel they had won the battle. Crowe held regular meetings with his foremen to reprimand them for accidents, yet he never slowed the speed of the work, which was the real reason for a continuous string of maimings and deaths in the work on the canyon.[532]

For Six Companies and Frank Crowe, the Great Depression was beneficial in that it kept the crews from thinking too much about unionization. Almost any job was preferable to being out of work. The presence of the men's families was another deterrent for jobs were difficult to find. Frank Crowe insisted that the wilder entertainments were located as far from the work zone as possible, but he did not banish them entirely. Racial and ethnic discrimination, price gouging at the company store, and the emphasis on speedy construction in an environment of poorly enforced safety and health regulations might have been improved with unionization,[533] but that would have cut into the profits. The precedent for low wages and usurious charges for every convenience provided by

[532] Hiltzik, 127.

[533] Hiltzik, 132.

private labor contractors seemed normal because it dated back to the prior century. Men were accustomed to only resting on Sundays.

There was a clear distinction between the government workers and the construction workers. The construction workers and their families were only temporary occupants of Boulder City whereas the government workers and their families would make their homes there permanently. Not only did the federal employees have finer houses and yards but they were also perceived as not having to work very hard in their air-conditioned offices, and their wives played bridge. The camaraderie and mutual support of the construction crews came from their relative hardships and that many had worked on other jobs together and knew each other from before.[534]

6.2.2.5 Construction Types – Residential

Tents were the choice for the Government Survey Camp #1 since, as at the APC dam sites, the work moved from place to place and there was no reason to build a permanent facility for housing a relatively small number of men for such a short period of time. Men's dormitories were constructed for the linemen and single men by Six Companies and the Bureau of Reclamation. These were spacious quarters: a one-story stucco villa overlooking the future lakebed and the second a two-story frame dorm plan. "No. 1" was up by the Administration Building and offered room for two men at $15 per month, including sheets, towels, and beds made.[535] Six Companies' dorms were two stories, planned in an H shape, with showers for 15 or 20 men at a time in the connecting

[534] Dunar and McBride, Mary Eaton, oral history, 139–140.

[535] Dunar and McBride, Tex Nunley, oral history, 62.

part,[536] but each man had his own bed in his own room and the linen changed whenever he wanted it.[537] Dorm #3 was by the recreation center.[538] It was air-conditioned. "No. 1" was later the "pest house," an isolation ward for communicable diseases.[539]

Houses were placed on sandy flats below the Administration Building. The layout was intended to be that of a model town. Saco Rink De Boer decided on a triangular-shaped town plan with the Administration Building at the head of the triangle. The recreational part of the city and the school were in the middle of the triangle, and then the business district arranged below that, leaving space for the residences of the government forces nearer the Administration Building. This shape was expected to allow for expansion later.[540] The Administration Building housed the Boulder City Library in the basement. The books were donated/discarded by the Library of Congress, and other books came from townsfolk.

Six Companies cottages were temporary, row upon row of White houses, with landscaping left up to workers who lived there. According to oral histories recorded by Dunar and McBride, the lots on Avenue B and Wyoming Street were laid out with three-room houses first, then two-room, and then one-room houses (called dingbat houses by

[536] Dunar and McBride, 61. William D. Mc McCullough, oral history. McCullough worked at building the dorms when he first came on the job.

[537] Sometimes the number of men working surpassed the number of beds. In some rooming situations, the beds were shared by men working different shifts, and the bed would hardly be cool before the next man got in it. The "H" shaped plan was similar to the abandoned one at Norris for the TVA.

[538] Dunar and McBride, Elton Garrett, oral history, 61.

[539] Dunar and McBride, Marion Allen, oral history, 133–134. Obviously, these Six Companies dorms were most desirable because the temperature was controlled.

[540] Dunar and McBride, Walker Young, oral history, 59.

the workmen)[541] below New Mexico Street. Houses were built by two carpenters per house with no helpers, and all materials were precut. It took twelve hours to complete a house on this assembly-line production schedule, not including finishing work such as screens, doors, windows, sheetrock, etc. There was no finished carpentry. The Six Companies portion of Boulder City was begun in June 1931, and the last house was done by March 1932.[542]

The Bureau of Reclamation brick houses were placed on the granite ridge overlooking Hemenway Wash and the Colorado River; however, the permanent but rapid pace of construction meant later problems with swelling of the clay soil.[543] Federal workers with better incomes obtained finer homes with green lawns and trees. As an alternative, the Olympic houses were very cheaply built for the 1932 Los Angeles Olympics athletes, and these were later moved to Boulder City to be used for employee housing. Several blocks on the eastern edge of town were reserved for privately built homes on Avenues K, L, and M. Former employees reported that many of these were built with scrap materials gathered from construction debris.[544] Other living arrangements could be made for residency at the California-Nevada Power Company dormitory. Centrally located, the Park below the Bureau Administration Building was a fine lawn that became the gathering place for families on hot summer nights. Growing the grass was quite an accomplishment in the desert. It was a huge expense because arable soil had

[541] A dingbat is an instructional character for the printer, which were sometimes left in the text by mistake. Because to the reader, the meaning was not known, readers associated the word with nonsense. One-room houses seemed nonsensical, so the sobriquet was locally applied to this type.

[542] Dunar and McBride, John Giek, oral history, 63–65.

[543] Dunar and McBride, Walker Young, oral history, 69.

[544] Dunar and McBride, Erma Godbey, oral history 71–72.

to be trucked in and the park took constant watering, but within a year of groundbreaking, the city appeared to be neatly planned, clean and safe, and a refuge from the Great Depression lurking outside the town gates.[545] The watering of landscapes proved to be the largest consumer of all. Tenants were obliged to pay for the water but could be fined if their landscaping didn't meet minimum standards. Some opted for xeriscapes of native plants and other materials such as colored rocks. Streets curbs, gutters, and sewers were installed by the New Mexico Construction Company using mule-drawn scrapers and scoops to move material. Mules were found to be better in sand than heavy machinery,[546] and everyone thought the water rising behind the dam would be available soon.

6.2.2.6 Construction Types - Non-residential

A small business district along Arizona Street and the Nevada Highway contained a few shops and grocers along with the town hall and a movie theater, but a hospital was not planned by the United States Government. Until Six Companies built a hospital in the town in 1932, men had to go to Las Vegas (30 miles away) if the first-aid station at the dam site could not take care of their injuries. The Las Vegas hospital was well equipped with modern facilities, but it was too far away to be practical. The doctors in Las Vegas went to Bureau offices in Denver to try to get a health care contract for the dam workers when the dam was announced, but the contract was broken after a year, and the care of the dam workers was given to a doctor who was a nephew of Mr. Kaiser,[547] a case of

[545] Dunar and McBride, 57–83.

[546] Dunar and McBride, 72–73.

[547] Dunar and McBride, Dr. Clare Woodbury, oral history, 129.

nepotism that would be considered so blatant today was not a topic for conversation in Boulder City.

The only patients treated at the new hospital in Boulder City were the workmen. Women birthed their babies at home with an attending doctor who was not connected with the hospital.[548] Boulder City had a succession of physicians at its hospital, but Dr. R. O. Schofield was the one who organized his office like a real hospital with a window for the business side of the operation.[549] This was the first Kaiser hospital, the forerunner of the ones we see all over the country today now called Kaiser-Permanente. Either the threat of disease did not disturb doctors at Boulder City, or the management did not want to take on liability if a worker did become ill. That the health concerns at Boulder Dam were not a top priority is evidenced by the fact that men died on the job with regularity and the sick filled the available hospital beds to full capacity each day.[550]

Workmen ate in a huge mess hall in shifts of 1,300 men. The mess hall stayed open twenty-four hours a day, operated by Anderson Brothers Supply Company.[551] Food spoiled quickly, and the brownish water was full of sand, so men became sick. Many deaths occurred the first year because workmen lived down in the canyon where it was much hotter, and they sweated day and night. The company doctors did not at first recognize that heat exhaustion could not be cured by simply drinking more water; it was only when a new doctor came on board that the addition of salt was made a standard

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[548] Dunar and McBride, Lillian Whalen, oral history, 131.

[549] Dunar and McBride, Bob Parker, oral history, 132.

[550] Dunar and McBride, Helen Holmes, Neil Holmes, Dr. Clare Woodbury, Walker Young, Dr. David Dill, and Bob Parker oral histories, 42–45. All reflect on the heat and the heat exhaustion that was not well understood at the time.

[551] Rogers 43.

practice.[552] The mess hall began adding salt to the lemonade to replace what men sweated out on the job. The second year (1932), air-conditioning was installed in the newly completed dormitories and the mess hall up on the bluff where "excellent food" was served and the men were transported to and from the dam in motor transports.[553] This concession greatly improved workmen's health. In 1931, thirteen deaths were attributed to "heat prostration," but in 1932 and thereafter, there were none ascribed to this malady.[554] Seven of these deaths were Six Company employees and four worked in the Anderson Brothers mess tent. Other deaths were not listed, including family members of men working at the dam.[555]

[552] Dunar and McBride, 45–46. Dr. John Talbot came as a member of a group under the aegis of Stanford-trained physiologist Dr, David Dill that studied the effects of heat on the workers. Dr. Dill later published his findings in *Life Heat and Altitude* published in 1938 by Harvard University Press and panned as no news at all later that same year in a review in the Journal of the American Medical Association (JAMA), Nov. 19, 1938, by an unnamed reviewer.

[553] Dunar and McBride, 44–46, and also see Hiltzik, 222, 223.

[554] Dunar and McBride, 317–318. The fatalities on the Boulder Canyon Project are listed in their Appendix C, including the date of death, name, employer, and cause of death.

[555] Hiltzik, 222, 223.

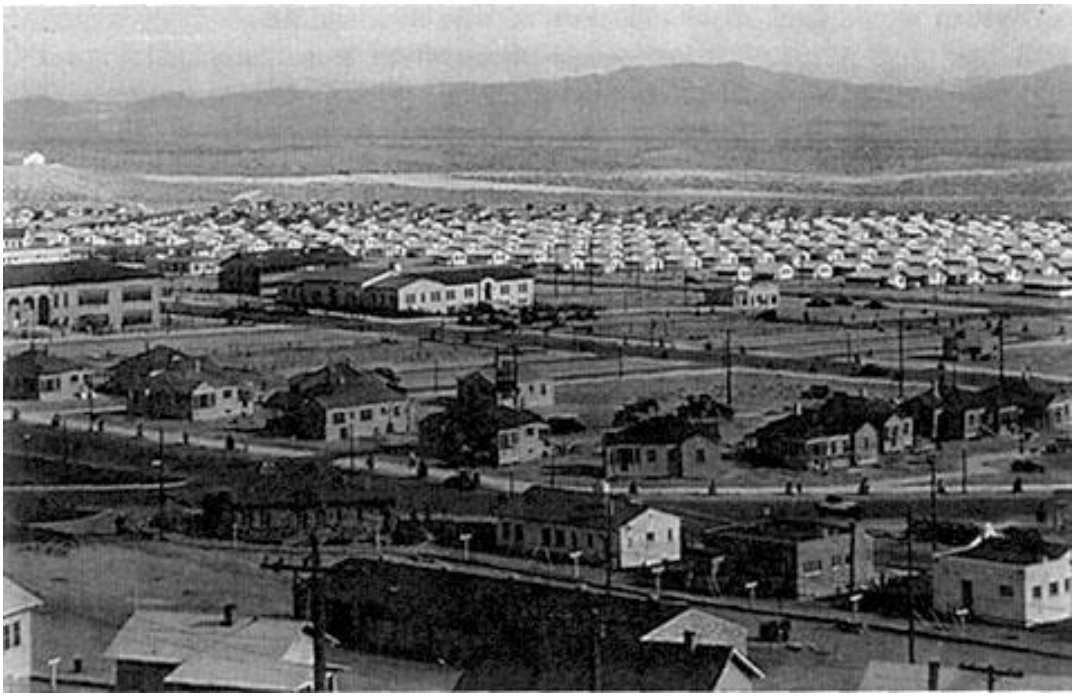
Figure 6.29 Boulder City, Nevada. Photo provided by the Bureau of Reclamation.

The dangers of the work and the prevalence of disease did not deter workers. There was never any shortage of men willing to work at Boulder Dam. Unlike the APC's dam-building projects of the 1920s, employees did not need to be enticed by the prospect of safe working conditions and above-average housing. There was no reason for frills in Nevada. The construction of homes for the workers was designed to accommodate unmarried men in bunkhouses, and married men with families rented cottages if they were temporary workers and finer more permanent houses if long-term employees similar to the arrangement at the APC dams of the previous decade. The most notable difference in the Alabama camps and the Nevada one was the treeless, monotonous flat terrain in Nevada as opposed to the rugged, shaded hillsides of Alabama and the resulting placement of the streets and buildings in the camp. Where Alabama's steep forest land was laid out with winding curves and park-like vistas, Boulder City was on a strict grid

with a hierarchy made much more obvious. One could scan the whole town in one glance from the surrounding hills. In the above photograph (Figure 6.29), the large dormitories are shown in the middle left with finer housing in the foreground and the smaller cottages of temporary workers in the distance. Housing for the long-term employees was roomier and the lots much larger than for temporary workers. Gardens and lawns were encouraged for all to help hold the imported soil in place.

Another difference was the weather. It almost never rained in Boulder City, but the sandstorms were terrible. All the construction made the problem worse. Tents blew down, people's belongings blew away, and some roofs blew off the cottages in Boulder City. Washing hung out to dry turned muddy, and it was necessary to shake the sand out of one's bedding at night before going to sleep. The houses let the dust in through the cracks in floors and around sills and rafters so people constantly had to shovel out the dirt that had come in during the night.[556] In Alabama, the forest was hot and muggy or there were torrential rain and mosquitoes, but the dry heat and constant dust from the blasting must have been hellish indeed in Boulder City.

Keeping warm in winter was difficult, too. Nearly all the electricity that came in from southern California was used by the construction crews so it was not available to heat the houses; however, the houses had electric ovens that could be used to heat stones that were wrapped with newspapers and put into the beds at night. The people found their own ways to keep warm.

6.2.2.7 Auxiliary Buildings: School, Church, Hotel, Shops

[556] Dunar and McBride, 62–76 and passim. Many people remembered and mentioned the heat and blowing sand in the early days of Boulder City.

Workers were drawn from all forty-eight states; their average age was thirty-two, and 40 percent of them were unmarried. Single men paid $1.60 per day for room and board and transportation to and from the site. Married men could rent unfurnished houses for $15 to $50 per month. Standard floor plans for five houses were developed; there were twelve air-cooled and heated dormitories, each with 172 rooms; four churches; one 700 seat free air-conditioned theater (the Boulder Theater); an elementary school (with operation and salaries financed by Six Companies); and restaurants. Boulder City's solution of stores and shops in a Southwestern style shopping plaza was a precedent for today's shopping plazas. The Boulder City Municipal Building contained the offices of the city manager and police along with a public library.[557] These amenities were very popular with the townsfolk.

The federal government did not provide funds for schools in Boulder City so families made do with makeshift structures financed with a small donation from Six Companies. The Boulder City Hospital was built by the Boulder City Company in 1931; it is now called the Sisters of Charity Retreat.[558]

Wives were not a large part of the Boulder workforce. A few might find jobs as secretaries or waiting tables, washing clothes, or caring for other peoples' children, but the ones who did work were always under scrutiny. Dorothy Nunley recounted her experiences working at the laundry. Another woman didn't have on stockings that were required for work where legs might be exposed to view. Mr. H. S. Anderson came in and "raised the roof. He told her that if she couldn't buy stockings on what he paid her, she

[557] Rogers, 43.

[558] Rogers, 43.

didn't have to work for him. I was behind the mangle where he couldn't see my feet, and I didn't have any stockings on either. But I was so afraid of losing that job because there weren't very many jobs for women in town. Boy, that night I went out and bought me some bobby socks right away."[559] The Six Companies was not concerned with the lives of the families beyond their visual appearance and whether it might impact the company's public relations in Washington.

The families and the employees of the Six Companies were imperiled by the weather, working conditions, and the management led by Frank Crowe and his cronies. Desperate men lost their lives at an unacceptably high rate, but the bottom line was more important, and that the job was completed two years early meant far too many risks were taken by everyone. The country was led by a far-seeing and caring president, but the Six Companies left a legacy of irresponsible leadership in the creation of President Roosevelt's dream and the great western metropolises of Los Angeles, Phoenix, Salt Lake City, Denver, and San Diego. There never was enough water to have the unlimited growth envisioned by the developers, and as Micheal Hiltzick makes clear, the dream is quickly "turning into a mirage."[560]

6.3 Summary and Conclusions

Alabama was first settled along the rivers and creeks that made the land fertile and later provided energy to operate mills and early types of machinery, but the real growth began with the iron and steel industries in Birmingham established in 1871. As the city rapidly grew, great fortunes were made, attracting investors from around the world. Many

[559] Dunar and McBride, 195.

[560] Hiltzik, cover notes.

of these new businesses were involved in the construction of housing for their workforces, and most were within the city or near enough to take advantage of the shopping, schools, and churches the city offered. They built their towns based on the symmetrical and formally balanced plans of the City Beautiful Movement with its long vistas and grand monuments prominent in the site plans. Where a large industry was planned, the landscape was modified extensively to accommodate the designer's needs with trees and hillsides leveled, and new trees planted along straight roads.

Others not fortunate enough to make use of the local amenities of a nearby town had to provide them for their workers. These settlements typically followed the topography, resulting in more spacious yards and gardens, the inclusion of existing trees for shade, and generally more healthful access to light and clean air. In other words, they were by necessity vernacular in their use of existing conditions for the best results and well suited to the local expectations of style and comfort.

The investors, planners, contractors, and material suppliers of these new towns and camps, many of whom were members of boards of directors and upper-level management men of these large commercial ventures, were the Birmingham elite. Their income and social status allowed their families to live in the most exclusive neighborhoods along the ridge of Red Mountain where they enjoyed a panoramic view overlooking the city of Birmingham. As mentioned above, the DeBardelaben family was socially prominent, and they also had a home on the crest of Red Mountain, but they maintained close ties with their workforce, even living for several years in the Overton camp when union activity made it dangerous to be too visible in the city. Most Birmingham executives had offices, at least APC and TCI/US Steel executives did, in the

Brown Marx Building in downtown Birmingham. Many also belonged to the Birmingham Chamber of Commerce, Independent Presbyterian Church, and the Birmingham Country Club in a newly platted garden suburb "over the mountain" called Mountain Brook.[561] Robert Jemison, Jr (Corey/Fairfield) served as president of the Birmingham Country Club (1917–1919) and was succeeded by Henry Fairchild DeBardeleben (Overton). No doubt there were conversations over drinks or on the links relating to the relative merits of housing workers on-site at the mining facilities, coking ovens, and blast furnaces that APC executives would have found interesting and informative. It would be reasonable to assume, therefore, that the similarities in the company towns and camps found throughout the Birmingham region were due not only to prevailing national ideas about housing workers but also local ones.

The TVA management had concerns for the presentation of its new town at Norris and how it would be received by the locals, many of whom had been displaced by the coming of the dam and subsequent water impoundment. Land to be flooded had been purchased and improvements made to the area such as new roads and homes that were built for civilians as well as employees in the new town. The local economy received a boost from all the construction, and local men were hired to work. Earle Draper, the head architect had a reputation for excellence (and for discrimination against Blacks and other minorities), and the construction went smoothly and quickly, producing a permanent

[561] Email correspondence with Leah Rawls Atkins, Sunday, May 5, 2013. This new suburb was Mountain Brook, Robert Jemison's newest venture, where many of the prominent sons of these families built their homes in the 1920s and 1930s. Atkins believes there must have been discussions about the progress and successes/failures of new company towns between the APC executives and executives at other large corporations in Birmingham.

small town that could serve as a bedroom community for Knoxville and Oak Ridge, Tennessee.

Housing and other structures followed the local vernacular styles and were sited on ridges and sloping lots with consideration for sightlines and privacy. Rents were well within the range of the TVA employees and others who commuted to work in the city. Adequate for the construction workers and upgradeable for later sale, the homes were built for quality and durability; likewise, the support structures were upgraded for useful lives as community libraries, meeting spaces, and other recreational facilities. A concern for the welfare of the employees and of the greater community was expressed in the landscaping of outdoor parks and recreation sites and the placement of major buildings and houses. Pains were taken to not damage the landscape when roads and foundations were laid, and if a building were deemed unnecessary for future use, it was dismantled by the CCC and stored for later use off-site. It remains an attractive small town in the forest, inhabited by nature enthusiasts and empty nesters although some houses have been enlarged for the families of today.

Boulder City, on the other hand, was the site of many excesses ranging from blatant disregard for employee health and safety to the squalor of the early camp, the dismissal from sight of the women and children of laborers, and the diminution of everyone who was out of luck during the Depression. The main problem here was with the selection of upper-level management.

CHAPTER 7. CONCLUSION

By the 1950s most of the camps had outlived their usefulness to the APC. However, many present-day employees who grew up in the camps remember their lives there with great fondness.[562] Unlike the TVA village of Norris in Tennessee and the town of Boulder City in Nevada, only one of the original homes remains. It is located at Jordan Dam and is the home of the superintendent of the dam at Lake Martin. It has been kept in its original style but has been updated over the years. It is the last of the "temporary" structures to remain "permanent."

A hundred years have gone by. Today mega-companies are building new company towns to house workers for corporations like Facebook, Amazon, Google, and Apple Computers. Perhaps this study of how the APC was able to ensure the loyalty of its employees and provide a healthy, comfortable, and family-friendly work and living environment can provide some guidance for the next set of futuristic entrepreneurs who dream of building the future for the citizens of a state. Certainly, there are lessons about gender and racial stereotypes and dynamics contained within this dissertation.

This dissertation is an attempt to describe and assess the planning of the early company towns constructed for the workers of the APC on the Coosa and Tallapoosa

[562] *Alabama New Center*, 10/7/2018. Bill Gardner, an engineer who worked for the APC in Environmental Affairs, assessed hydroelectric sites over fifty years old and in the process located some former residents of the Jordan Dam camp who were willing to share their memories. Read their statements here: https://alabamanewscenter.com/2018/10/07/156414/. The successor to the *Powergrams*, *Alabama NewsCenter* is the online daily journal for APC employees and friends. "In keeping with Alabama Power's century of work in economic development, Alabama NewsCenter aims to promote the good news of this state through original and shared content. Alabama NewsCenter is a credible, direct source of the news and information that matter most to Alabama Power customers. Alabama NewsCenter also tells the stories of the people and businesses powering our state, striving to make Alabama a wonderful place to live and work."

Rivers during the first third of the twentieth century. It depends almost solely on archival research on not-well-known company towns that are no longer extant. The company towns of the APC, despite their short lives, were instrumental in bringing the state into a period of industrial growth and prosperity, which was the stated intent of the founders of the APC. My purpose is to provide a general survey and basic history of this neglected aspect of the growth of the state of Alabama and our nation and to situate the construction camps of the APC in the scholarly discourse centered around corporate welfare, race, class, and gender discrimination and how these traits are manifested in the built environment, providing confirmation of much of what has already been said by others but with evidence from less well-known sites.

Although several excellent articles and books have been written, ranging from the planning of individual cities to company towns in general, no comprehensive and documentary treatment of the architectural planning of APC company towns has been produced. Urban historians have dealt with social, political, and institutional affairs, but the physical aspects of company towns have been described chiefly by architectural historians. This work is intended as a supplement for those valuable studies.

I have had several objectives in undertaking this study and during the research others have arisen, taking shape as more data came to light. While these are implicit in the pages that follow, a brief but explicit statement of them seems appropriate now.

My chief interests lay in discovering to what extent the APC company town planning was rooted in tradition and how much in then-current fashion. Yes, it is in the vernacular tradition, but there are ideas about employee housing and the control of workers implied by the spatial components of the sites. To what extent was this

intentional and how much was it simply “the way things are done?” This question proved difficult to answer because it is possible only to make inferences based upon extant drawings, plats, and articles published that are in the archives. I also hoped to document the progression of social and physical changes made evident in the construction process and the lifestyles of the company workers. Again, this can only be guessed at based on the documented and extant APC construction progress reports, gossip-type columns published in *Powergrams*, and consultation of the several other writers who may have interviewed occupants of the camps or have written their memoirs. I can compare with other company towns and camps whose own reality has been altered over time by memory and the agendas of the authors who write on those company towns. This part of the picture is therefore incomplete.

Another objective was to document the fate of these ephemeral communities and how well the designers planned for the short-term future. What were the lessons taken from one project to the next, and how were improvements implemented? I was concerned with the technical knowledge and the use of materials as well as the prevailing styles of architecture for worker villages, but I also found myself becoming interested in the persons responsible for the upgrades and maintenance of these villages. What were their motivations, and how well did they succeed? This line of questioning proved to return better results. One important characteristic of the layouts of these example towns and villages is the obvious influence of the European development of public squares, piazzas, or places, which can provide a sense of order even where it is lacking. The European tradition of garden and park design also strongly influenced the layout of cities especially the alignment of major streets. Still later, the sinuous lines of the English garden were

incorporated into the winding roads and romantic suburban developments of America's growing middle class. But because of topological and climate constraints, the APC camps invariably resembled the suburban and more rural Alabama country vernacular styles in the formal qualities of structures and layout of camp roads.

Maps, plans, and viewsheds are vital to our understanding of these planned towns and villages. Many photographs, plan drawings, and memoirs have been employed in addition to the records kept in the archives of the APC and the federal government agencies that were in control of regional and national projects. Combined with ideas about race, class, and gender as discussed by authors far more learned, I have begun to appreciate the minute details of placement, scale, and exclusionary boundaries that speak volumes about social interactions in the camps.

The construction work itself was the erection of the great concrete dams that impounded the waters behind themselves, allowing flood control and the generation of electrical power, an industry just coming into its own in the 1920s and 1930s in Alabama. The land to be flooded first had to be cleared by crews that were constantly on the move as they cut the timberlands, turning the trees into lumber to use in the construction of caissons, formwork, and some buildings in the temporary worker villages (camps.) Much of this work was of a temporary nature such as clearing the basin or erecting company housing. The men who did those jobs moved on to other construction sites when their work was finished. The camps themselves were ephemeral, necessary only for the duration of one dam construction project. The specialty workers would move on to another location and another job at the end of each construction phase. Only a few permanent houses were designed to be kept for employees who would monitor and

control the flow of power out to customers around the state. Typical construction time was about two to three years at the dam site. The locations of the dams were always in remote and wild settings where nobody would want to farm or live because the topographic requirements to form a lake are not the same as for raising crops.

Good architecture and planning were important in attracting and accommodating the large-scale labor force that built the dams. Because the sites were far from towns and the roads were poor to non-existent, the APC had to build a new city in the wilderness to house its employees. That isolated and inaccessible spot had to be furnished with all the things a real city must have to support a workforce of up to 1500 men and their families: schools, churches, meat and grocery markets, and outlets for social interaction. Men who were not married could be housed in bunkhouses and fed in mess halls, but families needed homes to raise their children. In response to existing social norms and with a view to the maintenance of healthy, happy, and productive workers, the APC undertook to furnish all the workmen's needs, and the management learned to be sensitive to employees' other responsibilities. The APC was able to find and hire men who would become loyal and efficient employees by giving them better housing and community services than were locally available or that they could afford in the city. Many laborers and unskilled workers were sharecroppers farming land owned by others. A steady-paying job was a huge incentive especially if the work offered a schedule flexible enough to allow harvesting of crops.

Also, there were differing needs for the hierarchies of workers. On the lowest end, common laborers (mostly Black) were the least likely to remain on the job for an extended time because of the work assigned to them. At the upper end, the engineers and

permanent operators would remain in the camp for years. Not only did all employees require lodging and food, they also needed healthcare and outlets for their energies after work, and they had to be managed so that all worked harmoniously together as a team. Safety and security were priorities always as the work was dangerous. Hospitals at the camps were well-equipped and staffed by competent doctors and nurses trained in first aid, patient management, and triage. Although the hospitals were far from the city, they provided the employees and their families with modern medicine in hospitals of contemporary and efficient design. Annmarie Adams wrote convincingly about how the space within hospitals changed during this time period and showed that the APC hospital designers were picking up the new ideas promoted by the important hospital architectural practice of Stevens and Lee, which had offices in Toronto (Canada) and Boston.

As the construction proceeded, new ideas and methods would be essayed to learn how to build better, quicker, safer, and cheaper. Information passed back to the designers was incorporated in the next set of drawings or instructions at the next dam site. The construction bosses knew their jobs well, but there was always room for improvement. Drawings were field modified to fit the local conditions, and suggestions were made for doing it differently next time. There was communication both up and down the line, and management made sure that the new ideas were heard and understood in the design offices. Designers were apparently keeping up with national trends in hospital design through the prominent physicians employed by the APC.

As well, when people began increasingly to visit for recreational opportunities, the APC was able to forecast the revision once again of buildings that had served their original purpose well but could now be turned to another use. Camp Mitchell was

invented, and marketed to office employees as an adventurous outing but with a nice bedroom, bath, and superior home-cooked style food. The camps were able to morph into venues for entertainment through the careful stewardship of managers like the Benzingers, who clearly relished their roles as camp masters.

Eventually, the camps were phased out as more families built their own lake houses, and public fishing and swimming facilities were opened by the state. The advent of the family automobile made the special excursion trains organized by the APC no longer relevant, and the days of Camp Mitchell and the A.P.C. Club ended. Today only a few of the original houses remain as witnesses to the changes that were brought to the wilderness.

The primary research was focused on documents and images in the APC archives. The yearly and monthly reports of the Dixie Construction Company, an entity formed by the APC to handle the construction of its hydroelectric dams, steam plants, office buildings, and other structures, the multitude of photographs and engineering and architectural drawings, the data collected from the payrolls and hospital reports, the advertising and promotional literature all have been instrumental in developing an understanding of the lives and the work of the individuals who spent time on the job (or off the job if they were down for a weekend visit). Many have worked to build the APC to what it is today from the dreams and vision of the directors, presidents, and founder William Patrick Lay. This documentation permits an unusually broad picture of life in planned, albeit temporary, communities.

The APC was proud of their camps, and in consideration of public relations, residents were encouraged to beautify the grounds and present a happy face to any

visitors. Landscaping was evidently an important status symbol at the APC sites as indicated by the numerous photographs of the flowering shrubs and neatly manicured lawns in each camp neighborhood, and the yearly company-wide contests for the best-maintained yards and homes of White workers. Results published in *Powergrams* and in local and regional newspapers also made the rivalries more competitive. Company photographers visited each camp regularly to record the newest structures added (since the camps were constantly growing and changing) and to take pictures of the contest winners. The published images indicate that many gardens were planted and not all to ornament the company's office buildings because some appear to be communal vegetable plots. The responsibilities of the employees for the maintenance and upkeep of their own homes and yards were promoted by the APC as showing pride for the community and one's own handiwork while supporting the goals of the progressive, paternal, responsible parent company, and keeping maintenance costs lower.

7.1 Social Differences Expressed in Architecture

Although generally described as serene and hygienic, the site plans of these worker villages raise questions about the arrangement of the camps for less than carefree purposes: viewsheds, whether intentionally located or not, suggest the provision of surveillance capabilities over the Black camps while allowing the White camps to enjoy their shaded park-like settings unmolested by the APC police forces.

The shacks of the Black workers were very small and cramped; they were intended for single Black men, but the men often brought their wives with them. They were provided with a heater/cooking stove and a cross breeze between the open door and one window for comfort. This is not the same arrangement provided at the White and the

Black bunkhouses (it is slightly better because of the better heating, privacy afforded, and the fact that wives were allowed) but still less than the White and Black family houses offered. There was a segregated mess hall at each camp where Blacks and Whites were served from the same kitchen but on opposite sides of the mess hall with the kitchen serving as the arbiter of the spaces.

Regarding the different treatment afforded White employees and Black employees, the feelings of the management are clear in the language that followed the inventory of camps at Lay Dam, but the company was willing to make things work.

> It is essential to hold the negro laborer on the work that he have his negro women (sic) along with him, as he will not stay in the camp unless the women are there. Consequently, provisions have to be made to take care of them. Another feature of holding the negro is that he be allowed to shoot "Craps" and play "Skin" (sic) his favorite pastime and card gambling game, and it is useless to try to stop them. The local county authorities realized this here (sic) and arrangements were made whereby the negroes did all of their gambling and card playing in the confines of their own quarters, and they were not molested there. They were not allowed to go elsewhere and play, and the Company police force saw that order was maintained. [563]

It is not unremarkable that the APC made these accommodations to keep the Black laborers on the job, but they could not afford to lose them. Of course, the Italian and Swedes of the foreign camps were allowed to prepare their own food in their own small kitchens, and a bakery was built so that these men could bake their own preferred types of bread[564] so there was a precedent of accommodating special groups. However, Black workers in Alabama were often treated unfairly by both big business and small operations. The APC had made it their directive and their obligation to treat all fairly when the patriarch of the company, Captain William Patrick Lay remarked, "I now

[563] *DCC Construction History Report, Lay Dam, 1912–1925,* 31

[564] *DCC Construction History Report, Lay Dam, 1912–1925,* 31.

commit to you the good name and destiny of APC. May it be developed for the service of Alabama."[565] On the same day, May 1, 1912, Mitchell released a statement to the press, indicating his lofty goals for the future of the state and its people:

> A new Alabama and new South, no longer poor but proud; a South coming into its rightful place; a South that would retain all the finest traditions of its glorious past but which, through that mysterious force flowing silently through the thousands of miles of transmission lines, like life-blood to the human body, would grow richer and stronger industrially. And the chain lengthens. Not only would ordinary creature comforts follow in the wake of electricity, but there would be better educational facilities, better roads, better homes. To make money is all right. To build any industry is fine. To build an industry that saves mankind from toil that it can well be spared, that reduces the labor and drudgery of women and so provides leisure for education and culture, truly is a much finer thing.[566]

Were Black laborers envisioned at this moment? Probably not, but the APC did make good on its goals for bringing the state into the twentieth century by providing a cheap and powerful source of electrical power that became the foundation of economic advancement and growth of not only commerce and industry but new towns and cities. Like the rising tide that floats all boats, the lives of all the people of Alabama were bettered as more opportunity flooded into the state to take advantage of cheap labor and inexpensive electric power.

As in the White side of the camps, there were hierarchies expressed among the Black employees too. Although most Black employees were working in hard labor positions such as pouring concrete or digging foundations and trenches, there were others whose jobs were dependent on more education and skills. The Black nurses and orderlies

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[565] Leah Rawls Atkins, *Developed for the Service of Alabama – The Centennial History of the Alabama Power Company, 1906–2006 (*Birmingham, AL: Alabama Power Company, 2006), 35. This happened when Lay turned over control of the APC to James Mitchell, Thomas Martin, and their associates on May 1, 1912, in Montgomery, Alabama

[566] Atkins.

at the hospitals, the concessionaires who ran the Black pool hall and dance halls, the cooks and waiters working in the mess halls, and the maintenance workers who kept the camp clean and tidy, all were more liable to stay on the job over longer periods of time and be regular employees with insurance benefits. The shacks of the Black temporary workers were made for use over only short periods of time, perhaps one season, but other Black workers lived in family houses and sent their children to the Black school. They still did not have the status of Whites, but they had stable jobs and, presumably, the possibility of a better future.

7.1.1 Attracting a Suitable Workforce

The APC provided satisfactory housing and a feeling of community for its workers. This was done in part because the company wanted to attract a suitable workforce to a remote location far removed from amenities found in the city. Still, the different typologies of the worker living quarters are resonant with questions about the shared living spaces. What were the social implications of the bunkhouses? Were they more like college dormitories or army barracks or were they essentially flophouses?

There is very little evidence found in the DCC job reports for the activities men pursued in their spare time although there are some possible inferences to be made from the plans for the structures providing a place for such activities. Because the rooms in the bunkhouses contained only bunk beds and a negligible attempt to provide heating (with a wood-burning stove) and cooling (by opening windows to take advantage of crosscurrents of air), it seems the bunkhouses were used only for sleeping. Men ate at the company mess halls and showered in the bathhouses provided for them by the APC so there was no need to provide these amenities in the bunkhouses. The camps had libraries and canteens

with pool rooms where men could spend their leisure hours reading for pleasure or studying for exams in the various vocational and self-improvement programs offered to them by the APC. A commissary provided miscellaneous notions and necessities that the men might require. The camp laundry tended to the workingman's needs for a fair price, or the men could do their own washing in the bathhouses although the company typically laundered bedding as part of disease prevention strategies insisted upon by Dr. Benedict. Employees were not charged rent for their rooms in the bunkhouses, but rents were paid by all those living in other company housing. This rent was deducted from their pay along with the cost of meals, insurance, and laundry.[567] The bunkhouses were a practical solution for housing unmarried men who did not have the status of management.

Workers who lived in private homes with their families had more options. Their wives shopped at the commissary for fresh meat, vegetables, and other foodstuffs as well as other necessities. They prepared meals at home on their electric stoves, bathed the children in the home's one bathroom, and cleaned and polished the furniture whenever they were not tending the flower and vegetable gardens the company encouraged for a variety in diet and savings at the company store. If a woman could hang her laundry to dry in the backyard and iron with the new APC electric iron, she was the envy of women in all the rest of rural Alabama.

Some women in the camps worked directly for the company as schoolteachers, telephone operators, cashiers, or stenographers, but there were a few who found the time to lead women’s committees and social groups like the walking club at Gorgas or wrote

[567] History of Construction, Lock 12, Vol. 1, 1912–1926, 30,31. Board and a bed in the bunkhouse were offered at $5.00 per week in the White camps and $3.50 per week in the Black camp because the Black workers were fed largely from leftovers from the White mess.

reports on their camp for *Powergrams*. They kept up with what was going on in the other camps and the outside world through the company publication. Some assisted their husbands with camp operations especially after the camps became weekend destinations for harried city office workers. Those women who worked in the big home office in Birmingham and smaller ones in other towns began to assert themselves as important players in the company public relations field. The APC was a company that offered a path to national recognition, and some who began in the office stenographer pool rose to hold high office in national organizations such as the National Electric Lighting Association.

Still, the camps were designed to feel as much like a small town as possible. Various social and leisure activities were possible in the community halls where films were shown and plays performed before a camp audience. There were pool rooms and libraries, and there were hospitals to tend the sick and injured. Church was held in the community hall and the mess halls could be cleared for dances. Employees were encouraged to better themselves through study, exercise in the fresh air, and playing various team sports in the APC sports leagues[369] (and outside those leagues sometimes), or hunting, fishing, boating, and swimming in the cool, clear waters of the newly impounded lakes.

7.1.2 Keeping the Employees Loyal to the Company

The APC wanted to ensure that the workers remained loyal to the company for an extended period of time so that time and money were not unnecessarily spent in training

and certification for specialty professional workers. Long before the days of "separate[568] but equal" legislation, the APC provided the same or similar recreational facilities to most groups in the camps as there was no nearby outlet for entertainment during non-working hours except that provided by the APC. Alcohol was a problem, especially when combined with card playing. Because of the threat of idle hands getting into trouble of several different and illegal kinds, the APC needed to keep men busy doing something during the hours they were not working, eating, or sleeping. A man might choose to mow his grass, trim the hedges, or pursue a hobby in the APC camps. Or he might choose to pass his time at the library associated with the school or in the pool hall that included a cigarette and cigar stand.

By the time the APC built Cherokee Bluffs/Martin Dam most of the skilled labor had previous experience from the Mitchell Dam job, or they were friends and relatives of previous employees, so they had someone to vouch for their characters. Some new employees answered advertisements in the local daily newspapers. The beginnings and endings of projects were the times these new employees were hired: carpenters in the early days and electricians in the latter days of the project. All new hires were subjected to extensive background checks before they were hired. Because the APC provided continuous employment over a long period of time, these jobs were held in high esteem, and the APC was able to draw from an employment pool extending over the whole country.[569] Most laborers were Black; the few White laborers were not given

[568] Howard Duryea, "A History of the 1923 Champions" *Powergrams*, October 1923, 16. The 1923 champion baseball team played in the City League, beating opponents such as Inglenook Construction Company (Birmingham) and Chickashaw Ship Building (Mobile).

[569] History of Construction, Lock 12, 30

accommodations on-site. A shortage of available men meant hiring a number of Mexican laborers who were brought in on a truck and housed in the Black shacks and bunkhouses in late 1926.[570] All minorities were treated unequally to Whites but not inhumanely. A problem for getting common laborers was that most of them were sharecroppers and had to leave work to plant or harvest at least twice during the year.

Company leaders sought to reduce the likelihood of any unhappiness or contention among the workforce by organizing baseball and basketball teams that played against teams from other camps in APC sponsored leagues. A hunting club meant that families owned working dogs and probably amended their diets with deer and duck in the appropriate seasons. A night school was begun for those who sought to better their lives or move up in the company hierarchy. Stock offerings were advertised to employees, and the cost could be subtracted from paychecks on a regular schedule to make purchases more attractive. Group insurance was taken out for all employees who worked at least six months and the benefits rose with longer employment with the company, encouraging men to stay on the job.

For employees not living in the camps (company executives, linemen, and office workers from Birmingham and Montgomery) the amenities found in the guesthouses ensured their use on long weekends or when visiting for a dedication, birthday celebration, or medical conferences such as those occasionally held in the camps by Dr. Benedict were certainly available. The APC worked out a deal with the L&N Railroad Company to run a special weekend schedule so the main office workers could get away for a weekend in the countryside at Lay Dam. The mess hall at Camp Mitchell (located at

[570] History of Construction.

Lay Dam) was considered to serve some of the finest fare in the South, at least by company promoters, so it became a destination worth sharing with dignitaries of high rank. This fact demonstrates the prerogatives of the highest class of employees to visit the camps but also the availability of the same accommodations to the secretaries and stenographers who came in groups for a party weekend. The guest house was open to all, but reservations were required.

The approach that the APC took toward their employees was very like the approach taken by the TVA at Norris. Both the APC camps and the town of Norris were planned to be comfortable and natural expressions of community life. Care was taken in the placement of buildings so that they did not intrude on others nearby, and houses generally faced the roads but were not aligned on a grid. Provisions were made for employees to have leisure activities, and social interaction was encouraged at least among the White workers. The situation at Nevada City, however, was very different. There the situation was uncontrolled in the beginning, and there were dire consequences because of that. Later, after the project was well underway, the federal government was able to build in a logical and orderly way, but this also meant the new city was laid out in very regular lines and obvious hierarchies unlike Norris and the APC camps.

7.1.3 Creation of Fellowship and Model Cities of the Future

The APC was able to ensure the loyalty of employees through the creation of the fellowship of the camps and at the same time promote the sales of electricity and electric household items by holding up the camps as the cities of the future. The APC was successful in creating a community among the employees who were attracted to the remote locations of the dams by the homes, schools, hospitals, and churches along with

some resources for food and entertainment. The employees were quite loyal to the company, in part because of the community created by the efforts of the company but also because they shared a common expectation of doing the right and good thing for their home state and its people. These workers tended not to go to other companies when the work was completed but instead to move with their superintendents and bosses to the next job at the next dam although some went to work for the TVA when they saw a prospect of better jobs or higher pay rates. The on-the-job training and experience were valued by the company and practically ensured the men a job with the company at a time when there were few jobs available. The new techniques and methods, new machinery, and advances in communication all were affected by the growing use of electricity so the company and workers all were committed to the advancement of the company. Employees too could feel empowered by the ownership of electrical appliances in their own homes. That ownership made them the envy of other Alabamians who did not have the means to pay something down and a little a month. The APC made easy terms possible for their employees partially for the great public relations advantages it gave the company. It was a benefit the employees could enjoy at a small cost to the company, and, at the same time, promoted the sales of electricity to the people of the state of Alabama. The sale of electric ranges was a particularly big part of the public relations programs at the APC, and some women were able to rise quickly in the company to positions of respect, and their expertise was recognized in *Powergrams*.

7.1.4 Public Relations

The APC wanted to celebrate the advances represented by electrical power and to advertise their wares to the public. The APC recognized the value of public relations, and

on the occasion of a dedication of a dam, the whole APC community was brought together to celebrate (according to their rank in the company hierarchy.) Reporters and photographers were invited along with other dignitaries so that the public would become informed of the event. The APC directors and management understood the importance of public representation of the company as beneficial to the people of Alabama and to business interests at home and abroad. The APC wanted to get the word out about their happy employees and the importance of generating hydroelectric power efficiently and cheaply. The APC and its management were becoming consummate ad men, and they were getting international attention, especially in the medical field, because they were innovative thinkers who did their best to make the APC a leader in the field of hydroelectric power generation and distribution but also in the treatment of workers and their families. Any type of dedication ceremony would be written up in *Powergrams* in multiple articles, some directed toward the engineers and more directed to those who appreciated the latest gossip about fellow employees.

Most of the women employed by the APC worked in offices in towns and cities around the state. Women's jobs ranged from the switchboard operators (these positions were also filled by women in the camps) to sales and marketing positions.

7.1.5 Provision of the Healthy Environment

The company wanted to provide a healthy workplace and living environment for the families of the workers so that the company town, or camp, served as a flagship for the company's own publicity campaigns. Neat lawns and screened windows in freshly painted or Whitewashed homes boasted of the positive effects of the pest control programs required by company authorities. From the gambusia in the shallow waters of

the lakes to the contests to see who could swat the most flies in a day to the sanitary sewers and trash and garbage collection services provided by the company, all were involved. Not only was better health gained but in this way, a more photogenic and picturesque landscape was provided for the camp photographers and visiting dignitaries who came to see the successes of the newest hydroelectric construction project and the camps where its workers lived. There is no question the APC wished its employees to feel part of a close-knit familial community in which everyone got along with his neighbor.

What can be observed in the *Powergrams* articles are neat, clean, and attractive houses and yards/gardens that signify pride in the presentation of people's homes and the care taken by the APC to plan for the photographer's visit. The contests held each year for cash prizes and recognition in *Powergrams* for the best camp, cleanest house, and most productive garden gave the residents a reason to maintain their homes to a higher standard. The APC had envisioned a better future for the residents of the state, but they also were in business to make money. How better to reach both goals than to offer the camps as models for the consumer? Civic and social groups were encouraged to visit.

They were welcomed to satisfy their curiosity about the cities in the wilderness. During the month of July, two large "excursions" were entertained, one from "Troy civic clubs" with 250 members and another from the American Legion at Montgomery that brought 125 members and friends to Camp Mitchell.[571] The APC knew that the more people from outside the camps who were able to appreciate the finer parts of life in the camps, the more electrical appliances would be sold the better the reputation of the

[571] J. U. Benziger, *DCC Progress Report*, July, 1923.

company would become. Advertising by word of mouth is widely thought to be the very best kind, and the APC had become adept at managing publicity.

There were other kinds of visitors to the APC camps. A party of world-famous physicians "attached to the medical division of the League of Nations" visited Mitchell Dam in the fall of 1923 to observe the methods used by the APC to keep the camp disease-free. These physicians were funded through the Rockefeller Foundation, and only a few spoke English, but they were extremely interested in the fact that the APC had seeded the lake with gambusia,[572] a small minnow with a voracious appetite for mosquito larvae.[573]

Not only was Dr. Benedict concerned with the hospitals and patients treated by the APC doctors and nurses, he oversaw the sanitation facilities of the camps as well. In the same issue of *Powergrams* in which the foreign doctor's visit was summarized, Dr. Benedict's letter to the editor was published concerning the water supply at Mitchell. He proudly pointed out that the process for water purification was the same as that used by the Birmingham Water Works and that he was gratified to know that water samples were sent in every two weeks for testing. The tests showed the sometimes-muddy Coosa River water, drawn through the gravity filter and subjected to chlorine gas at the camp filtering station, to be "absolutely sterile."[574] The visiting physicians approved wholeheartedly of

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[572] "I See by the Papers", *Powergrams*, August, 1923, 18. APC engineer F. C. Weiss (for whom another dam was later named) constructed ponds around the lake at points that would be inundated when the water rose behind the completed dam. These ponds were stocked with gambusia which fed on the mosquito larvae and multiplied rapidly in their small ponds. When the water rose, the minnows were released into the lake where they went on to breed and multiply, thus controlling the population of mosquitoes. This was a reprint from *The Montgomery Advertiser* which originally published the article. The plan was so successful that it became *de rigueur* for all subsequent APC dams in the state.

[573] "Foreign Physicians Visit Mitchell Dam", *Powergrams*, October 1923, 8–9. Led by Dr. Benedict, the doctors spent an entire day at the camp.

[574] Dr. S. R Benedict, "Our Hospital at Mitchell Dam", *Powergrams*, May 1922, 2.

the pure crystal-clear water emanating from the taps at the camp, and "the ever-present safeguards and devices for the prevention of accidents, the arrangement of dwellings to take advantage of natural drainage, the insect-proof construction of the houses, and hundreds of other details apparent at once to the eyes of sanitary engineers."[575] This positioned the APC on the world's stage. That the world-renowned Malaria expert, Dr. William C. Gorgas was connected so closely with Alabama and the APC gave even more importance to the sanitary programs in place at the camps.[576]

Benedict also scheduled regular meetings of all the APC physicians at one or another of the camps so that the latest strategies could be discussed, and the host camp shown off. Meals were specially prepared and served for the APC physicians either in the mess halls or more often in the guesthouse. Each camp had some provision for accommodating overnight guests of the company.

7.2 Longevity of the Camps

Because of their location, some camps were more likely to remain inhabited than others. For instance, Gorgas Steam Plant was located nearer to Birmingham. The mining of coal that the APC maintained as a side operation to supply fuel for the steam plant was carried out in an area renowned for its coal seams. The coal mining communities that grew up around Gorgas meant a ready supply of employees who could afford to buy or rent homes after the steam plant was completed. Because the Gorgas plant used steam to

[575] "Foreign Physicians Visit Mitchell Dam", *Powergrams*, October, 1923, 9.

[576] Dr. Gorgas was an Alabama native, who worked under Dr. Walter Reed at the Panama Canal. There he was able to control the spread of Malaria and yellow fever by draining the swamps and eradication of mosquitoes. His research at the Panama Canal allowed him to save countless lives, but it also allowed the APC to win a lawsuit at Lay Dam when Dr. Gorgas, as a professional witness, instructed the jury that mosquitoes do not fly further than a mile from their birthplace.

turn its turbines (instead of water), the necessity of keeping employees on-site to run the plant meant the camp had to be more permanent.

In 1945, the APC remodeled all the existing houses at Gorgas Steam Plant, installing new kitchens, baths, and floors in its houses. Several new houses were built, eleven of them for new employees.[577] Many families still live in Gorgas houses built by the company, although not all the current families are connected with the APC. Because Gorgas was close enough to Birmingham, it has survived as a suburban town similar to the TVA town of Norris in Tennessee.

The camps were upgraded with each new instantiation. Plans were drawn up in the Birmingham office where a cadre of trained draftsmen assisted engineers and architects in the creation of plans for the several construction projects underway at the same time. Often these generic plans were adapted to the needs of the site by the foreman and his workmen in the field as necessary and reported back to the main office. Going forward the draftsmen adapted the plans to represent these changes, and they might be changed again should site conditions warrant. In this feedback loop, the Dixie Construction Company and the APC evolved the most efficient strategies for the next round of construction at the next site.

Most important, it seems the company and its employees truly were of benefit to each other and to the state of Alabama. This community of APC workers was and still is like a family. Building cities in the wilderness was an important idea that did change the course of history for Alabama. The architecture of the houses and other buildings in the

[577] "Modern Mining at Gorgas," in *Coal Age* (New York: McGraw-Hill Publishing Company, September 1948). No page numbers were used.

APC camps was not remarkable for its time or place. Successive improvements were made as the need was recognized in the APC camps, maybe because of the short duration of the camps and the reconstruction of new camps regularly.

Most of the houses at the APC sites were used for a short period and then either abandoned or sold to other owners. By the 1960s, most workers could afford to own an automobile, and APC hydro projects were being built close enough to nearby communities for workers to commute to the job, so no more worker housing was constructed. As the workers at the existing camps moved away, the houses were demolished if they were not sold to other workers. The APC did try to prolong the use of its investment in living quarters and specialty structures like the boathouses or meeting and entertainment spaces, and, of course, the employees were encouraged to visit on vacations. But the APC had had to purchase all the land that would be inundated with the filling of the reservoirs, including parcels that would only be partially flooded. The company owned many acres surrounding the beautiful lakes they created. Over time, some land was sold to families for their own lake house retreats.

Not all the land fronting the lakes was sold for recreational uses. Some land was dedicated for park use by all Alabamians. Public boat launches and boathouses were constructed in parks or at APC sites by the 1950s. The APC still retains a sizable portion of the shoreline properties on their lakes. However, many Alabamians have built their own lake houses, lessening the need for and usage of the public camps and Camp Mitchell. No longer is it fashionable or necessary for groups of workers to pool their resources to have a weekend retreat at the lake. The APC camps have therefore disappeared by slow attrition.

7.3 Conclusions

This dissertation has examined the physical changes over time at five APC construction worker villages. The sets of conditions affecting the design and use of the individual camps have been shown to have evolved as managers learned by experience. The quality of living of various groups has been compared along with labor and social structures, health and safety standards, camp layouts, placement, and building typologies. Some worker villages historically have been planned to produce the "right" environment to maximize profits while ignoring the quality of life for the workers. There is a long tradition of paternalistic concern for the welfare of workers and their families. The APC has been a product of its environment both physically and ethically but also, fortunately, conceived and managed to operate on a higher level than merely that of a commercially successful enterprise. It was based on the local Birmingham culture and labor force from the time of inception, a time when most everyone in Birmingham had come from somewhere else to establish a claim to the phenomenal growth and profit the newly established city was providing to entrepreneurs. Despite the vast differences in housing and other amenities offered by companies around the United States, the working conditions, pay scales, and the difficulty of the work to be done, the APC was so concerned with the quality of life in its camps that the men would move their families with them to the next construction site because they knew there they would find friends.

Different groups were accommodated in the camps in different ways and levels of comfort. Provisions were made for married and single men and families with children. The employee's social and economic status was certainly embedded in the architecture, as was his ethnicity. Because the APC camps were not near towns and cities that could

provide entertainment and release for the men, facilities were provided to make life in the camps more like living in a small town. Schools, churches, and opportunities to hunt and fish kept employees busy when not working and offered a social outlet where new friends could be made. Parties were organized in the White camps, and all the happenings at the dance were reported in the social news sections of *Powergrams,* allowing men who had worked together on other jobs to keep up with old friends. We can know only about Whites; *Powergrams* was published for the White employees. Whether there were any other interest in a company newsletter is probably moot since many Black Belt (the portion of the state in which the four example dam sites are located) Blacks could not read. Some workers were expected to be part-timers because it was understood these sharecroppers had farms to manage and that they were needed for harvest times each year. The least effort and expense were invested in shelters for these workers.

Powergrams was a strong tool for a company interested in directing its employees toward certain company goals. Used as a way of building a community of workers and keeping employees loyal to the company and on the job away from the unions and at the highest levels of productivity and safety, the publication helped meet the goals of the APC. Whether the whole impact this one tool had on the workers were envisioned in the beginning is hard to imagine since it appears that events conspired to build upon each previous small success. Who would have guessed that the employees would become so interconnected among the camps? Over time and as men moved around from camp to camp, certain friendships were nurtured by news from a third camp, or news of a promotion could be enjoyed as if the friend were there.

At once a club and a billboard, *Powergrams* could be used by the company to make announcements of competitions for students, sell appliances, spread news from the battlefronts of world wars, and announce births and deaths like any newspaper. But it was personal in a way the *Birmingham News* or *Wall Street Journal* would not have been. Employees took ownership of the paper and their lives through this common experience of life in the camps. It could also be used to introduce and promote company public relations agendas.

Company branding included the employees whether they were aware of it or not. Many outsiders visited the camps, some of them of especially high standing in the eyes of investors and directors. That is why the camps were kept spotlessly clean and neat. To keep the costs of a landscape maintenance crew and janitorial staff from skyrocketing, the company introduced the Clean-Up Contest with cash prizes for the winners each year. The cash prizes, though they represented a princely sum to the employees, were but a pittance compared with the cost of the maintenance crews that would have had to be employed. The gift of the group insurance policy was also less than the company would have had to pay out if an employee were hurt or died on the job, and it kept men loyal to the company. This is the kind of corporate welfare practiced by the APC.

The APC promised lofty goals from the time of its initial founding. Its premise was to better the lives of the people of Alabama whom the company served and to effect change by raising the standards of health and happiness for all. One of the goals was to bring electricity to all parts of the state. The first rural route built by the APC was in 1920 and ran to ten farms and one cotton gin. Only one other rural line in Minnesota was

older.[578] It was not until the 1940s that APC was able to make a push to complete the rural electrification because so many farmers were sharecroppers or tenants, and neither tenant nor landlords were willing to wire the houses (Figure 7.1).[579]

Figure 7.1 Bud Fields and family, Hale County, Alabama, 1935, Walker Evans.

The need for giant profit margins and hefty incomes seems not to have been the most important force driving the company investors and directors. Things were done "right" and at the lowest cost, provided safety was not impacted by cutting the wrong corners. New technologies were employed, refined in the field, and adapted to the needs of the site and the workers who used them. Sometimes new techniques were developed at

[578] Atkins, 125.

[579] Atkins, 241.

the APC camps that were shared or taught to others such as the health practices championed by Dr. Benedict and published in medical journals as well as in *Powergrams.* Mistakes were made, but these were generally seen as opportunities for improvement, and the company built upon its experiences, moving steadily forward even during the Great Depression.

The APC is, in the end, one more example of corporate welfare, race, class, and gendered discrimination in the South during this time period. The discrimination is manifested in the architecture, the social frameworks, and the daily activities in the camps, and this discrimination underscores what has already been pointed out by many other scholars before. I hope this dissertation adds to the previous literature in such a way that it can help scholars discover the many levels of discrimination and improve the discussion of what paternalism and corporate welfare really mean to us today.

Other questions might arise from a study of the APC dam construction villages. The APC was the forerunner of the TVA, which was influential in the later construction of the Hoover Dam, much larger in scale and budget than any of the APC sites.[580] How much was learned by trial and error and passed on down the line? The APC was an early player among hydroelectric-generating plants in the South and in the nation. There is a lineage that must be established by combing through employment records and payrolls of all companies involved, but this will have to be left to another researcher.

[580] Some of the construction workers who had worked for the APC, especially those who worked at Gorgas, later went to work at Norris for the TVA. Skills honed at APC construction sites would have made them very desirable workers for the TVA, and men whose homes were in the northern areas of Alabama might have felt it better to work in Tennessee than to travel to middle Alabama. It will fall to another researcher to compare lists of employees to ascertain how many and who and when these men went to work for TVA.

In today's environment of enormous corporate investment in cities that vie for the opportunity to host companies such as Amazon, Apple, Google, and Facebook, which may bring hordes of new families to the area, might there be lessons learned from the experience of the APC in Alabama a hundred years ago? Some things will remain important, such as the creation of the feeling of community and belonging to an entity, which is building something good for the rest of the people of the state and nation.

Others, such as the provision of health and recreational facilities, are well established today and expected of any employer no matter how small. Perhaps a better judgment of the takeaway for present city builders might be how to value employees and their families and how to ensure they remain loyal to the company. Times have changed, but perhaps not all that much. An image that could become a logo is apparently a perennial favorite (Figures 7.2 and 7.3). The lineman will always be an important part of the APC team and makes for a superhero personality that will be associated in our collective minds for all time.

The people of Alabama continue to enjoy halcyon days at the lake and the many benefits affordable electrical power brings to life in the twenty-first century in great part because it was thoughtfully provided by the good men and women who had a grand vision for the betterment of Alabama.

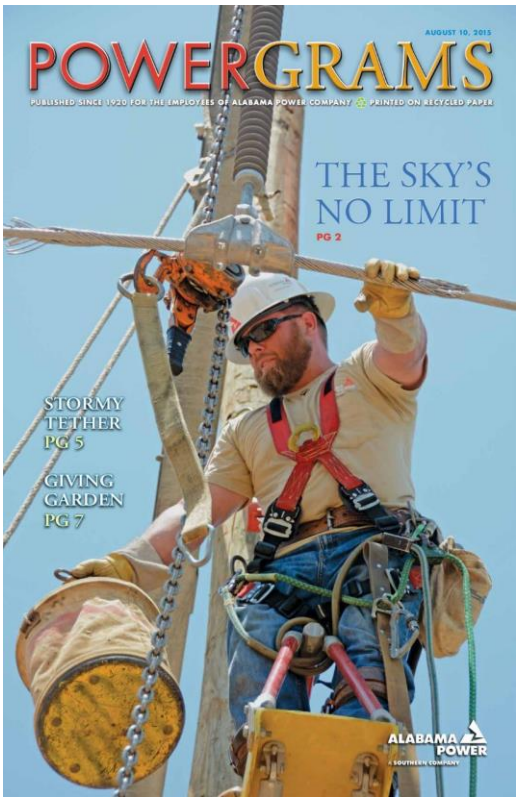

Figure 7.2 The Sky's No Limit Powergrams 8-10-2015.

Figure 7.3 Ride 'Em Cowboy Powergrams, October 1924.

APPENDIX: ALABAMA POWER COMPANY INFORMATION RELEASE

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VITA

Marietta Monaghan was born and raised in Birmingham, Alabama where she attended Mountain Brook schools and watched from her bedroom window each night as Vulcan on his mountaintop wooed Miss Electra atop the Alabama Power Company Headquarters Building. Historic narratives have always captured her attention and the stories of non-represented groups were always understood to be as important as those of the famous. Reconstructing common histories was secondary only to her love of the outdoors and her horses, which afforded many opportunities to build and think about architectural space in its various forms. Her earliest construction project was a remodel of a children's playhouse which resulted in it having to be torn down as the removal of a window made it too unstable and unsafe. She was five, but learning by doing.

Prior to pursuing her PhD in Architecture, she received a BFA in Art History from the University of Georgia, MA in Art History at The University of Alabama at Birmingham, and MS in Architectural History at Georgia Institute of Technology.

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